

1.1 ELECTRONIC CAMERA

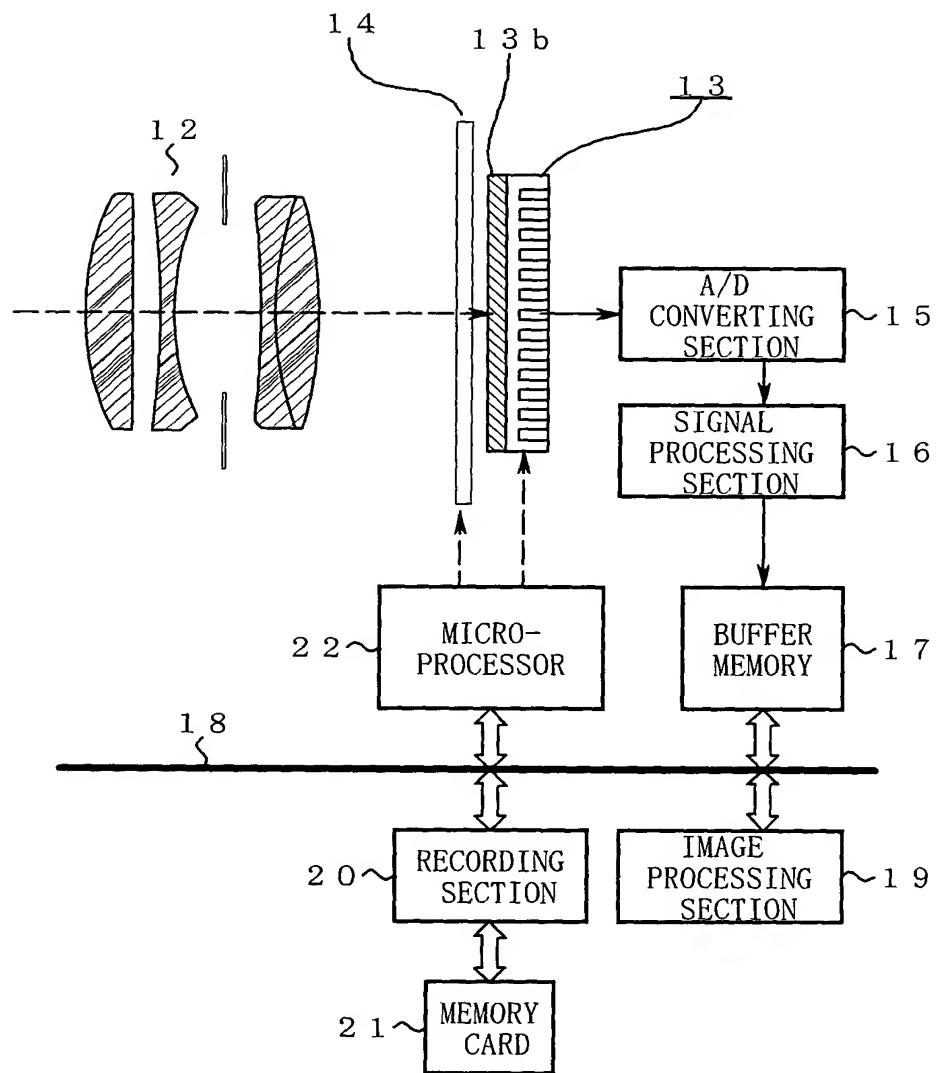


FIG. 1

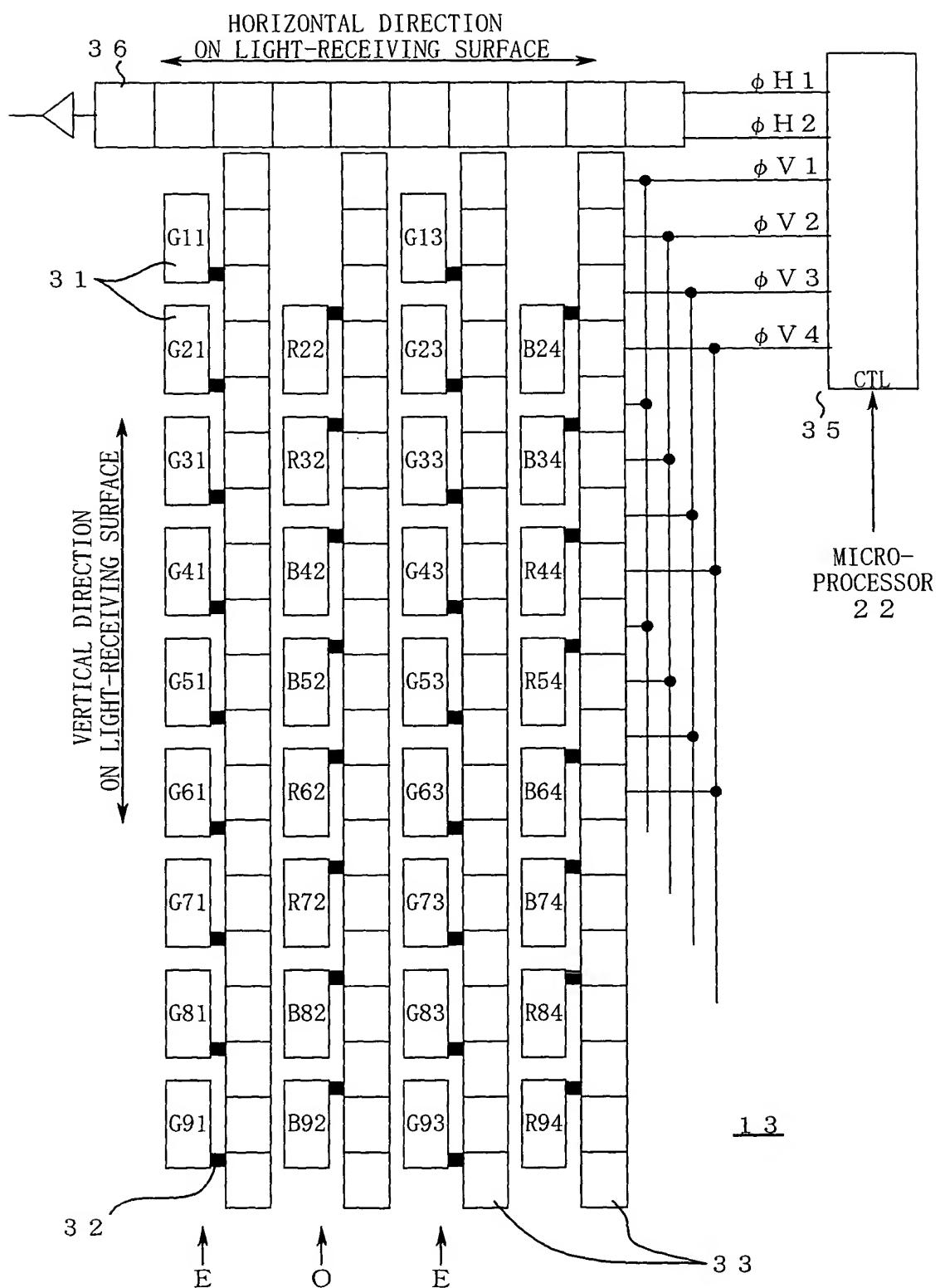


FIG. 2

E : EVEN NUMBER ARRAY
 O : ODD NUMBER ARRAY

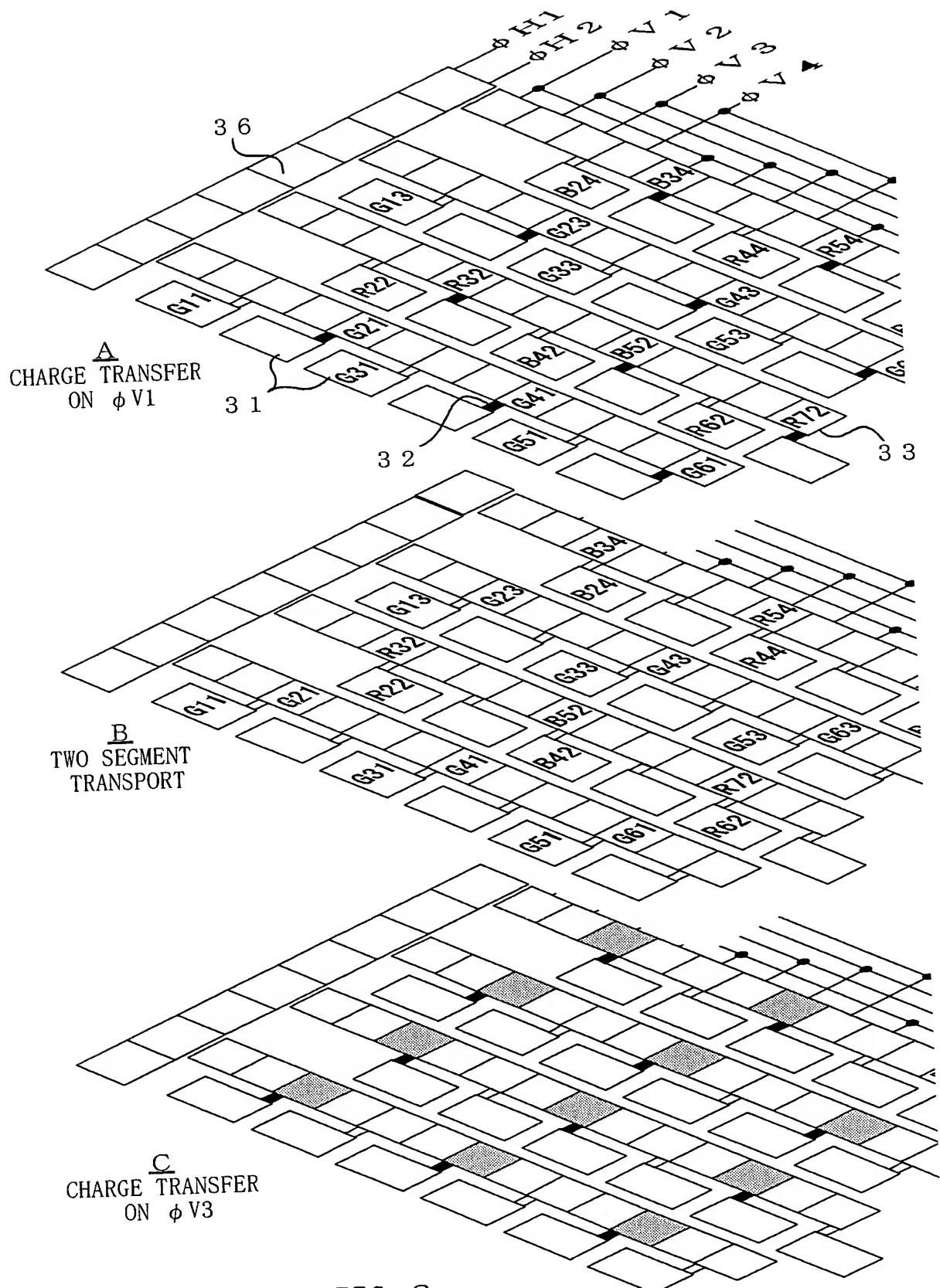


FIG. 3

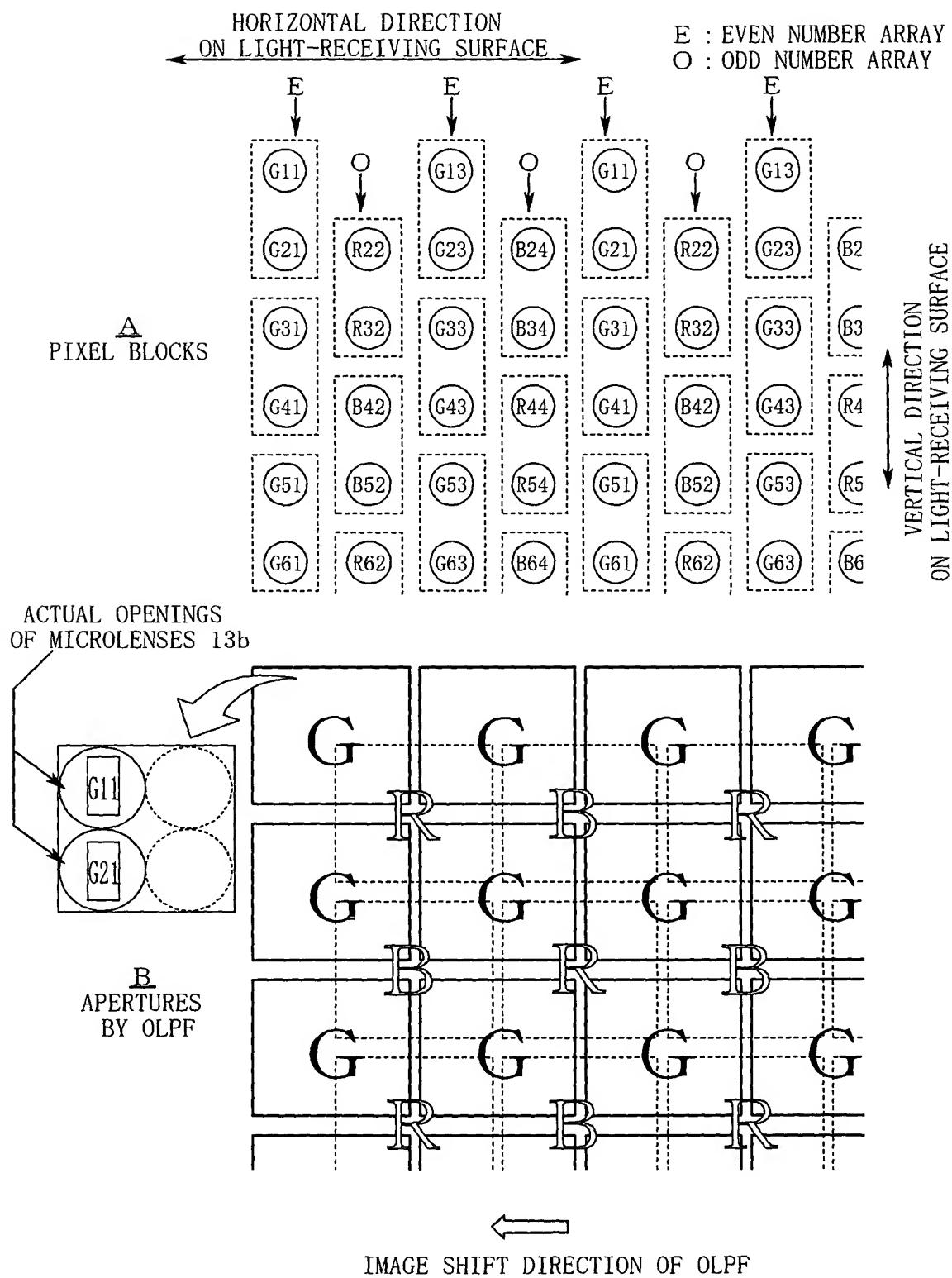


FIG. 4

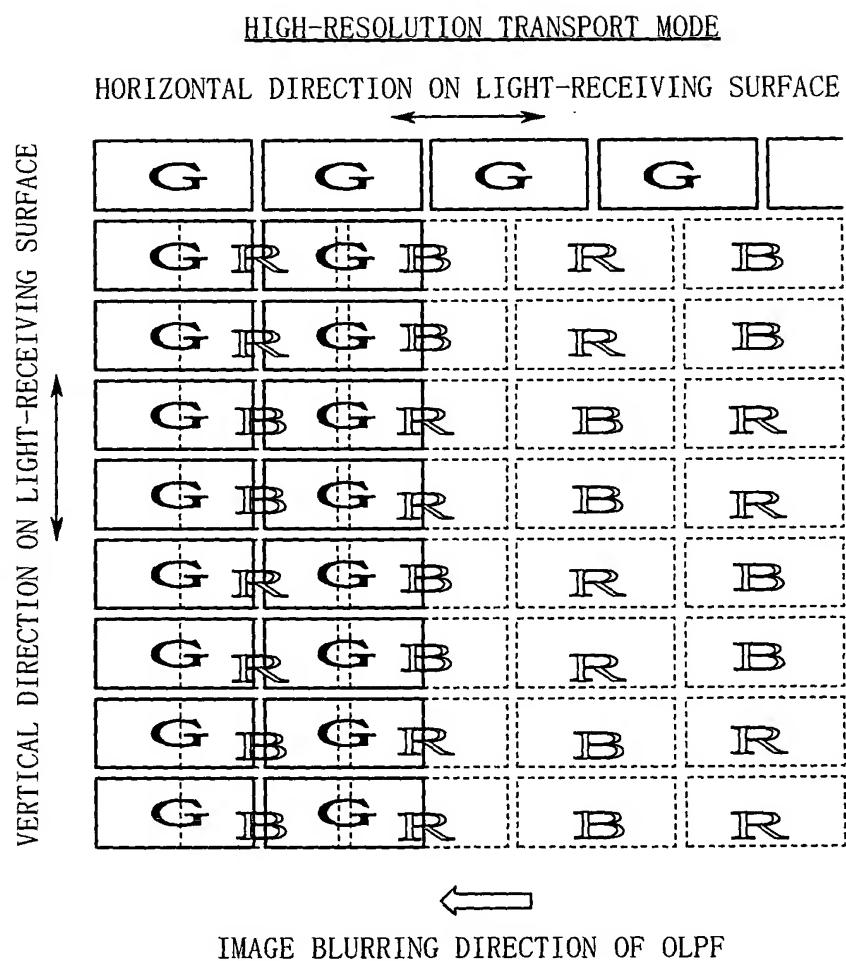


FIG. 5

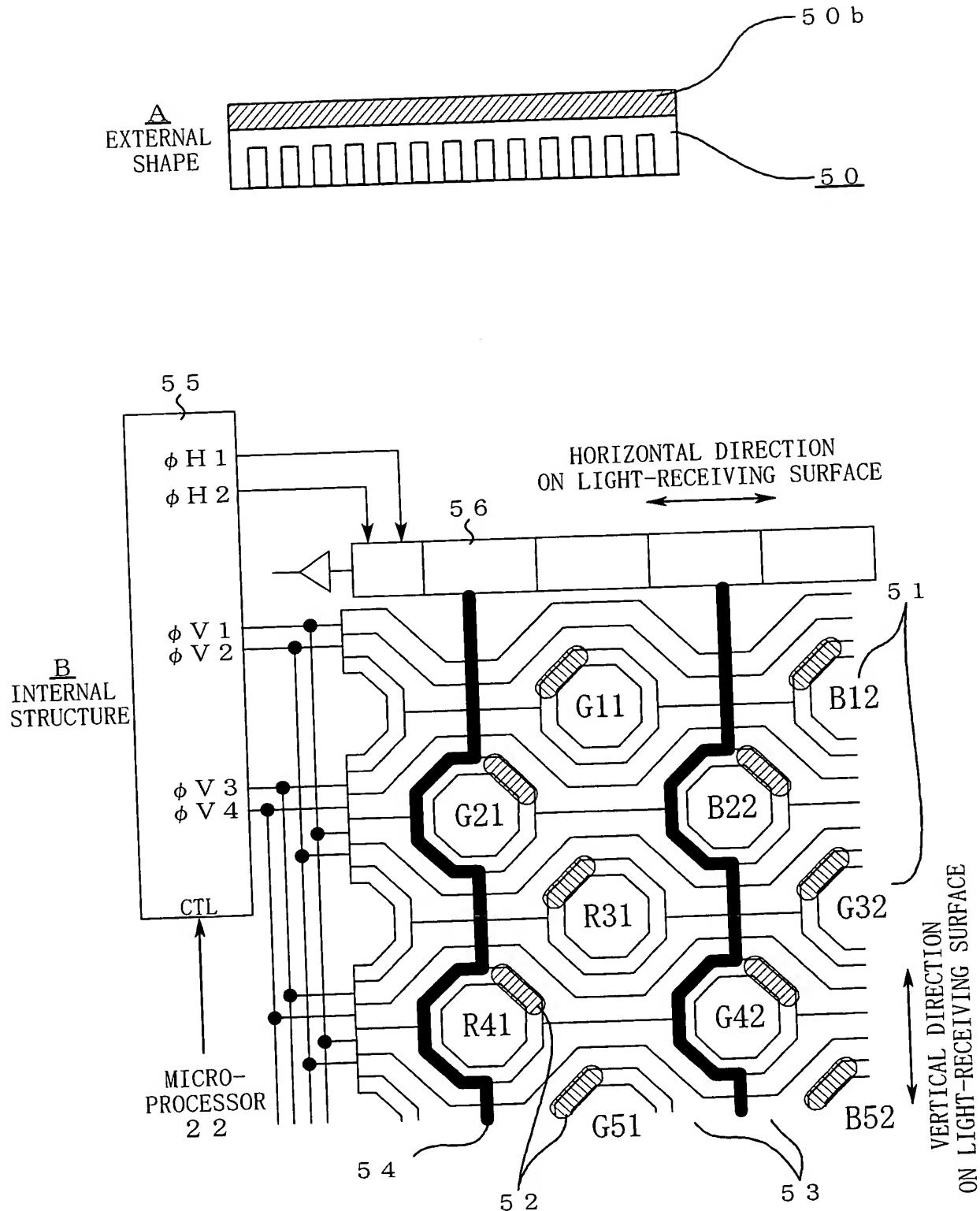


FIG. 6

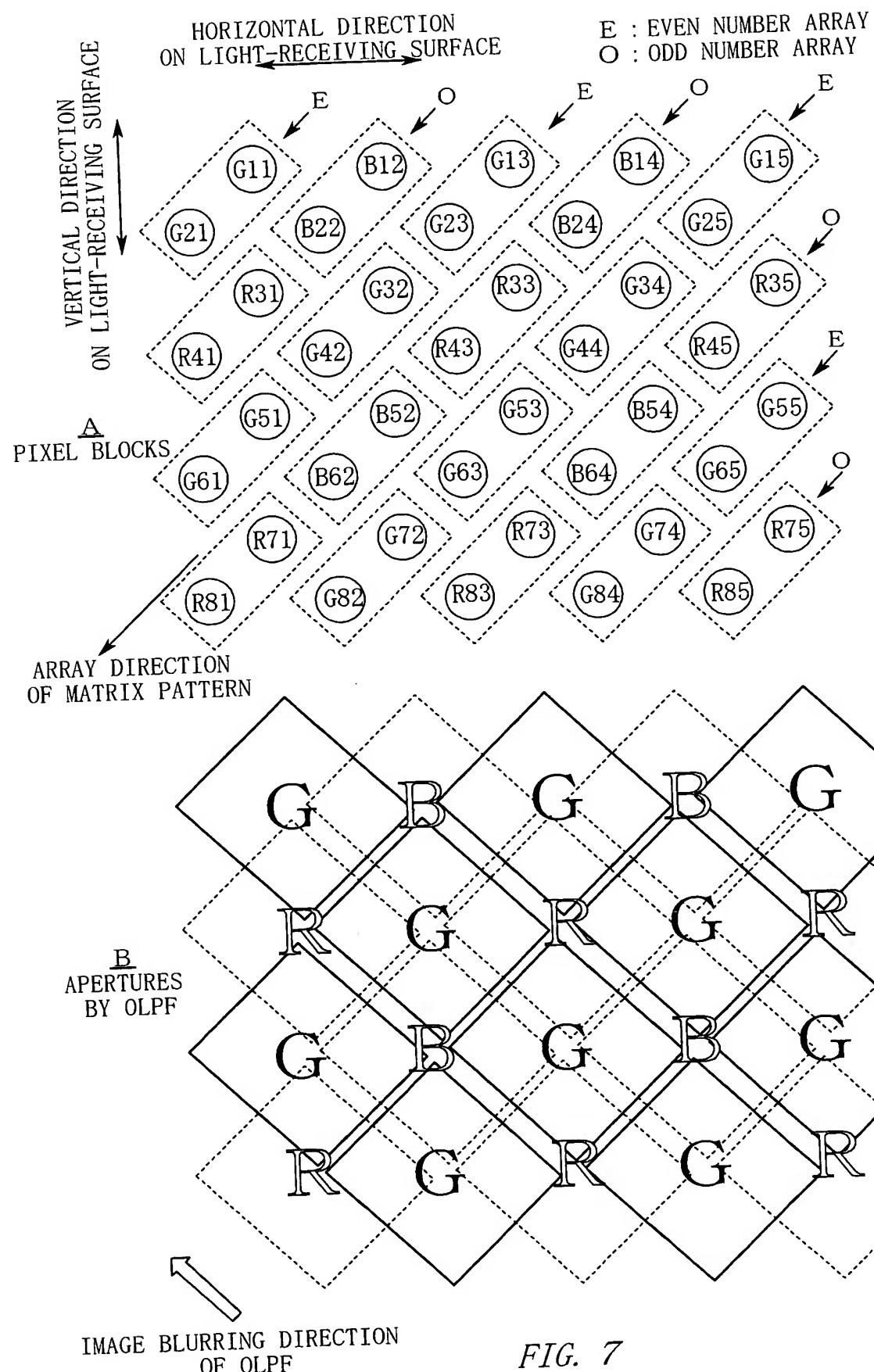


FIG. 7

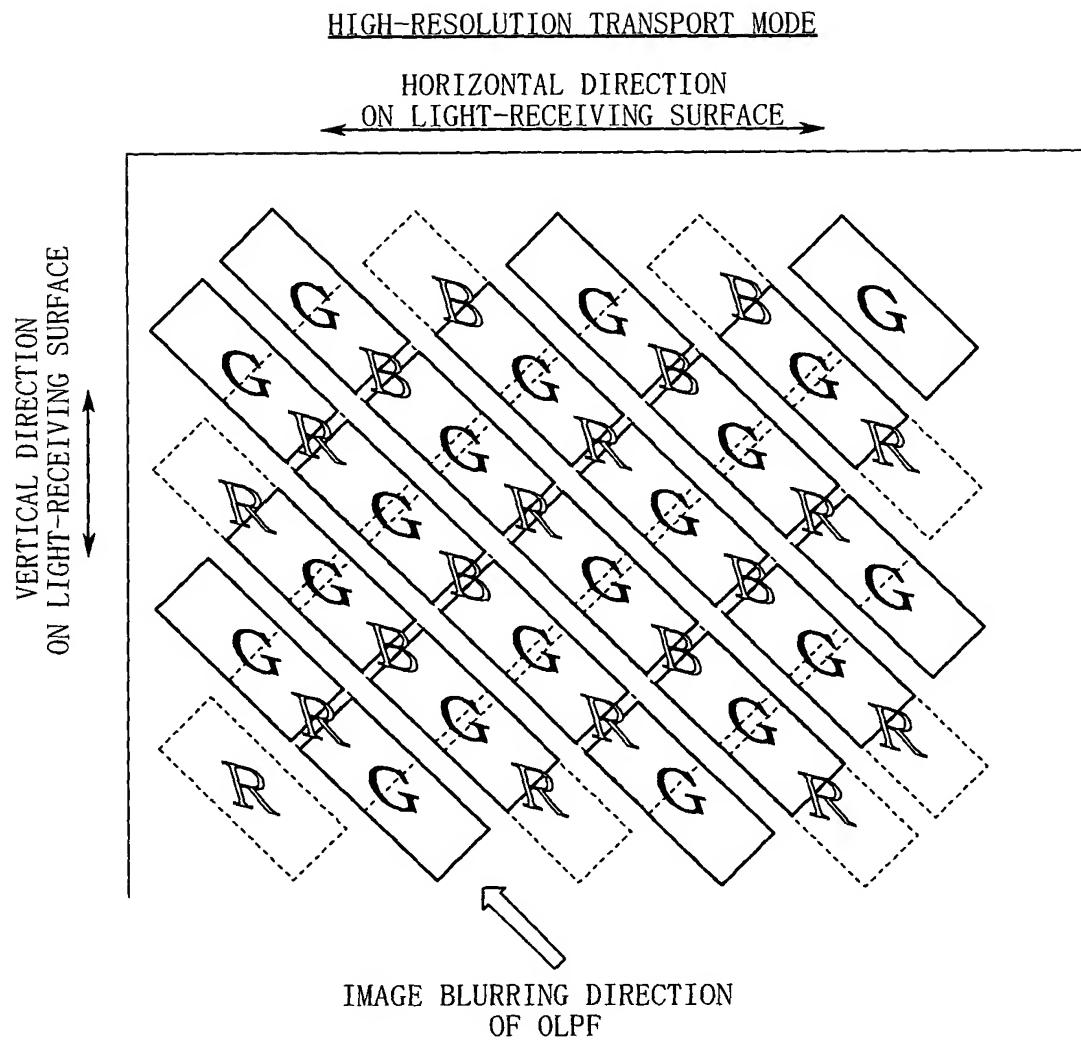


FIG. 8

E : EVEN NUMBER ARRAY
 O : ODD NUMBER ARRAY

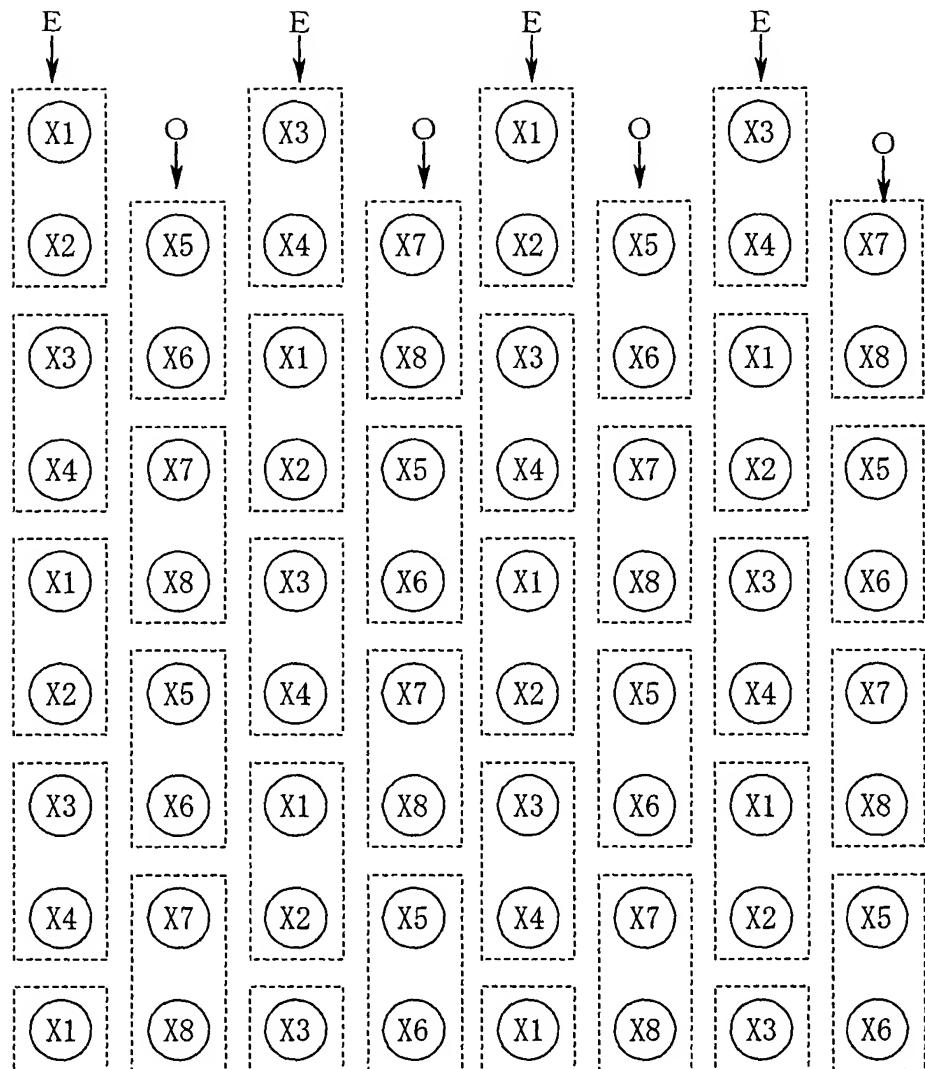
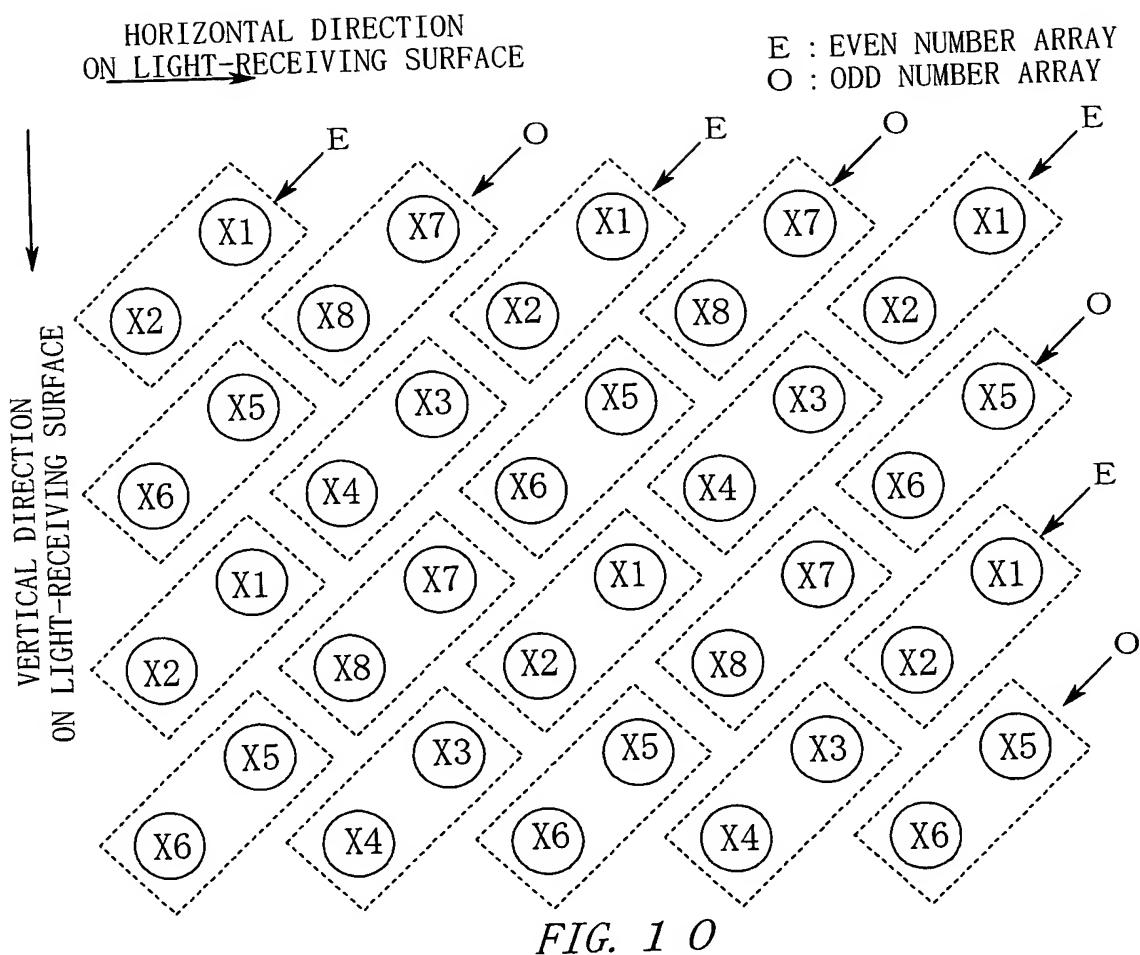


FIG. 9



	X1	X2	X3	X4	X5	X6	X7	X8
CFA PATTERN 1	G	G	G	G	R	R	B	B
CFA PATTERN 2	Y	Y	Y	Y	R	R	B	B
CFA PATTERN 3	Cy	Cy	Mg	Mg	G	G	Ye	Ye
CFA PATTERN 4	a1	a1	a2	a2	a3	a3	a4	a4

FIG. 1 1

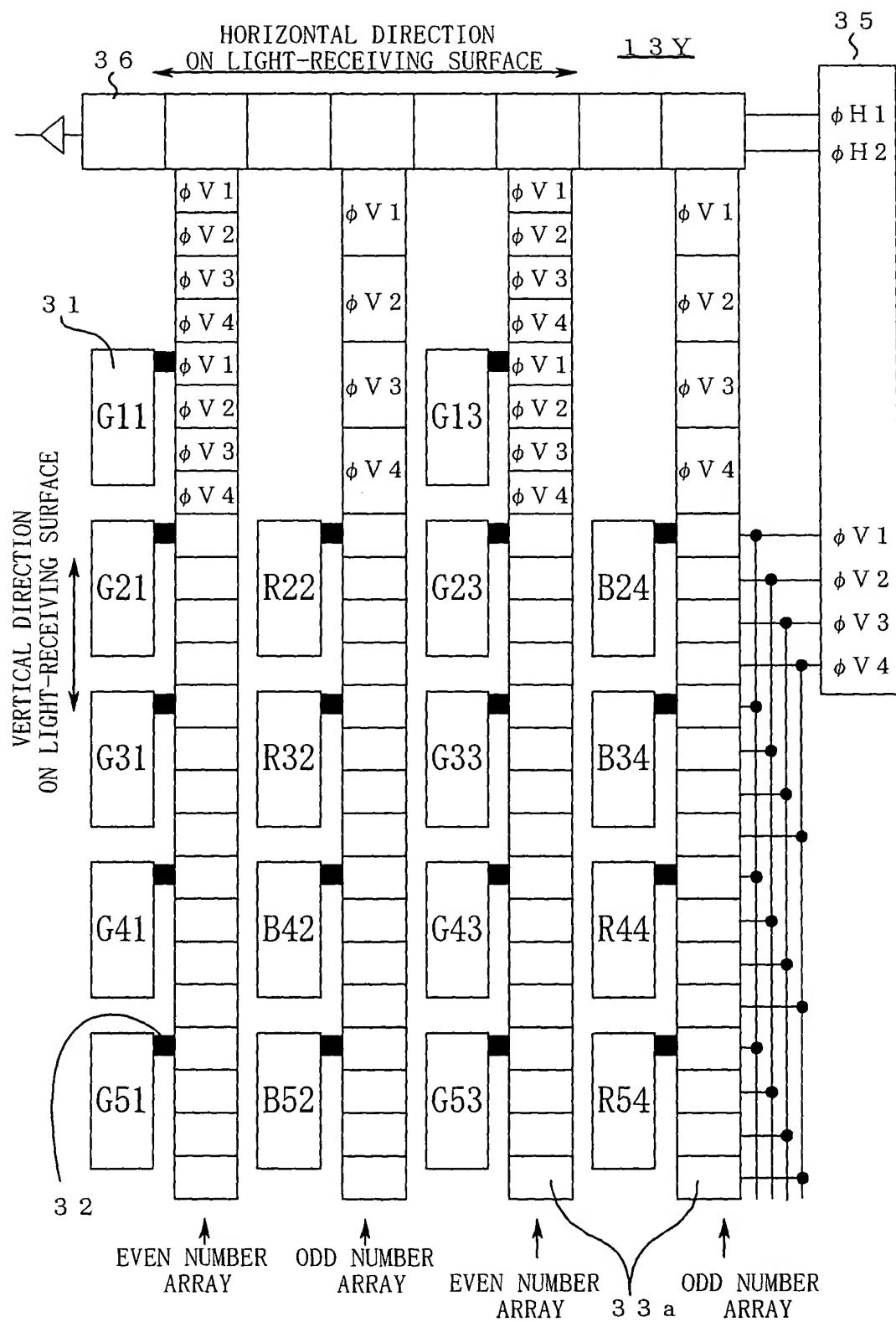


FIG. 1 2

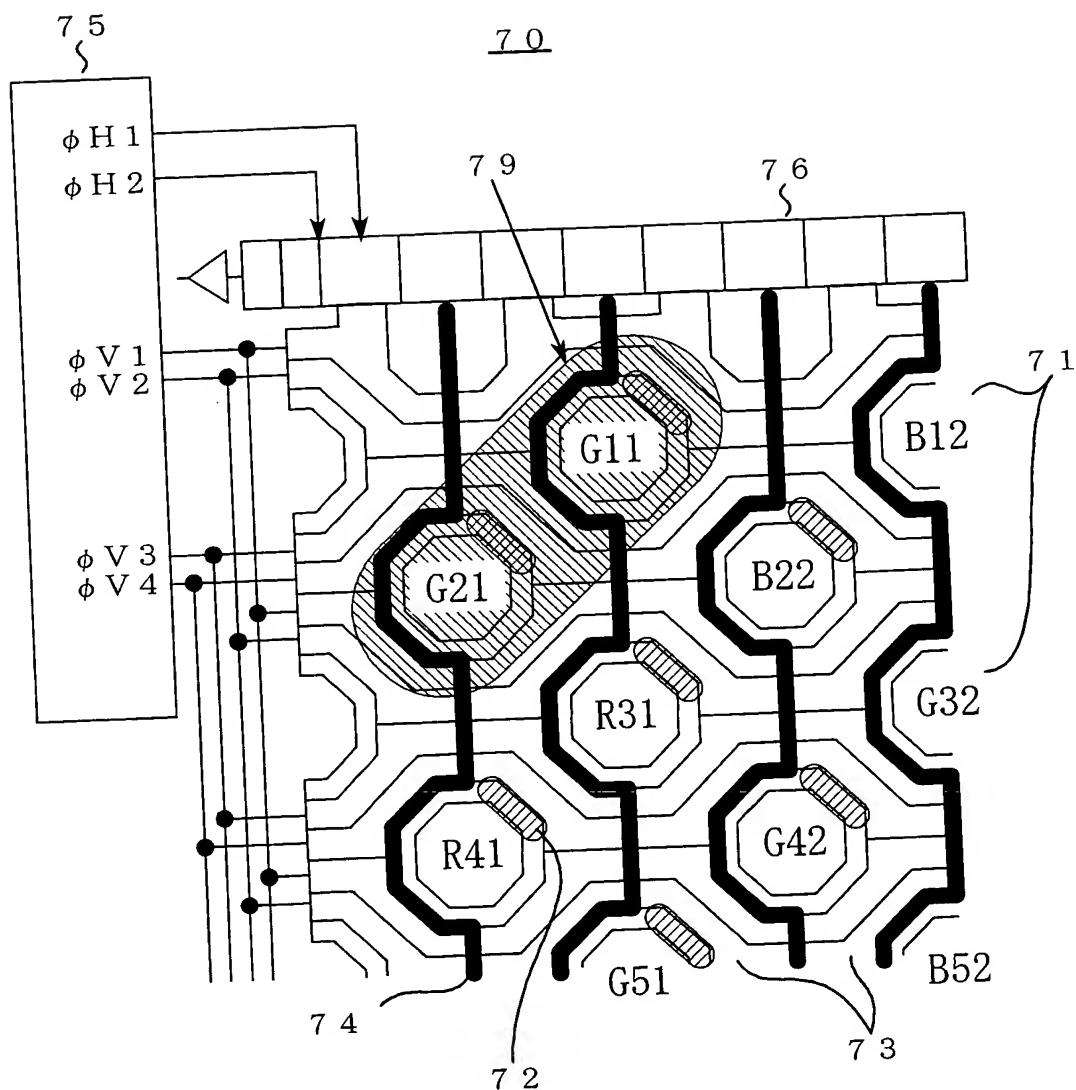
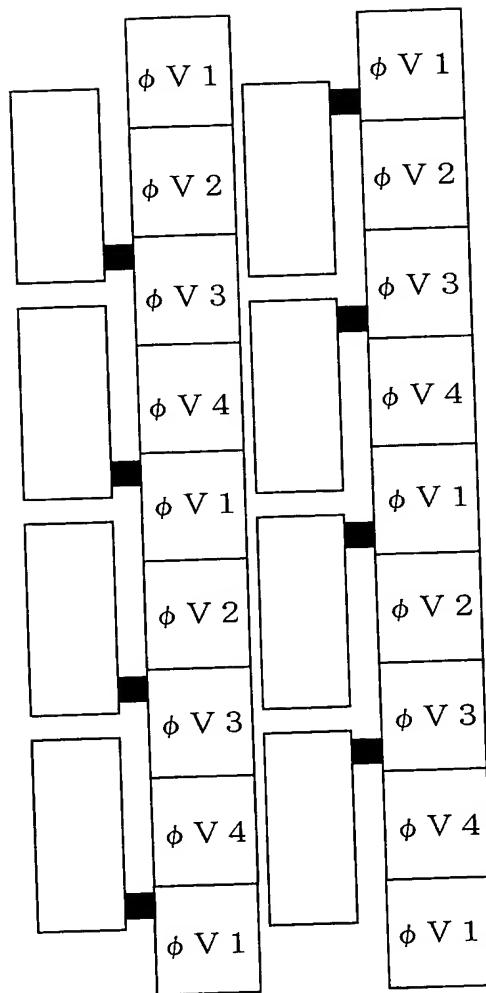


FIG. 1 3

[A PATTERN]



[B PATTERN]

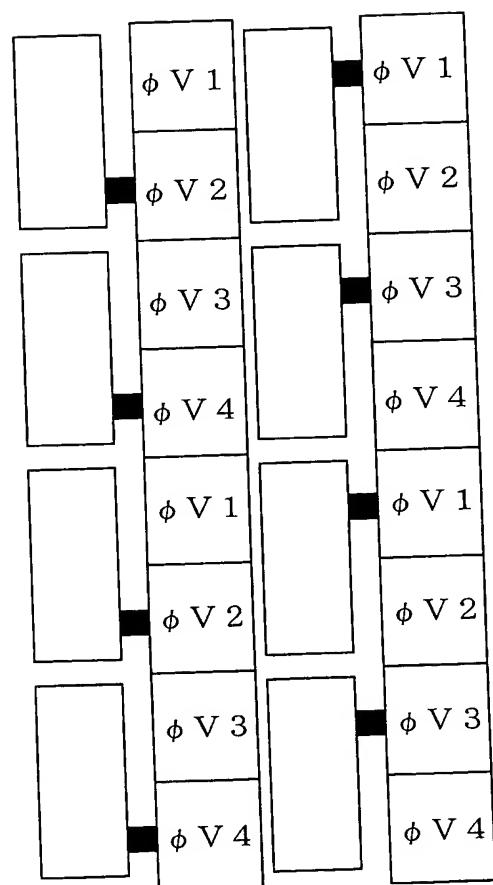


FIG. 1 4

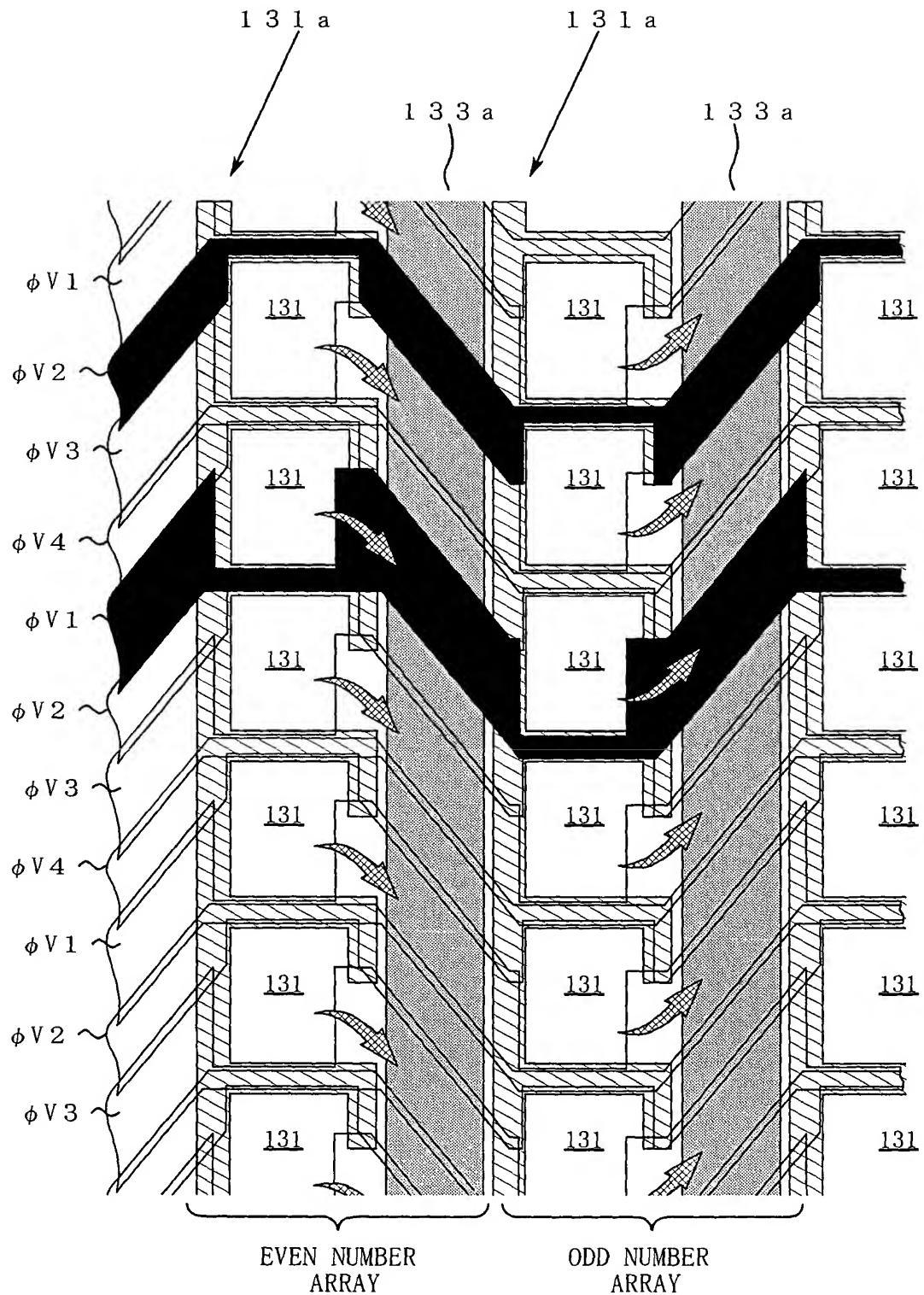


FIG. 1 5

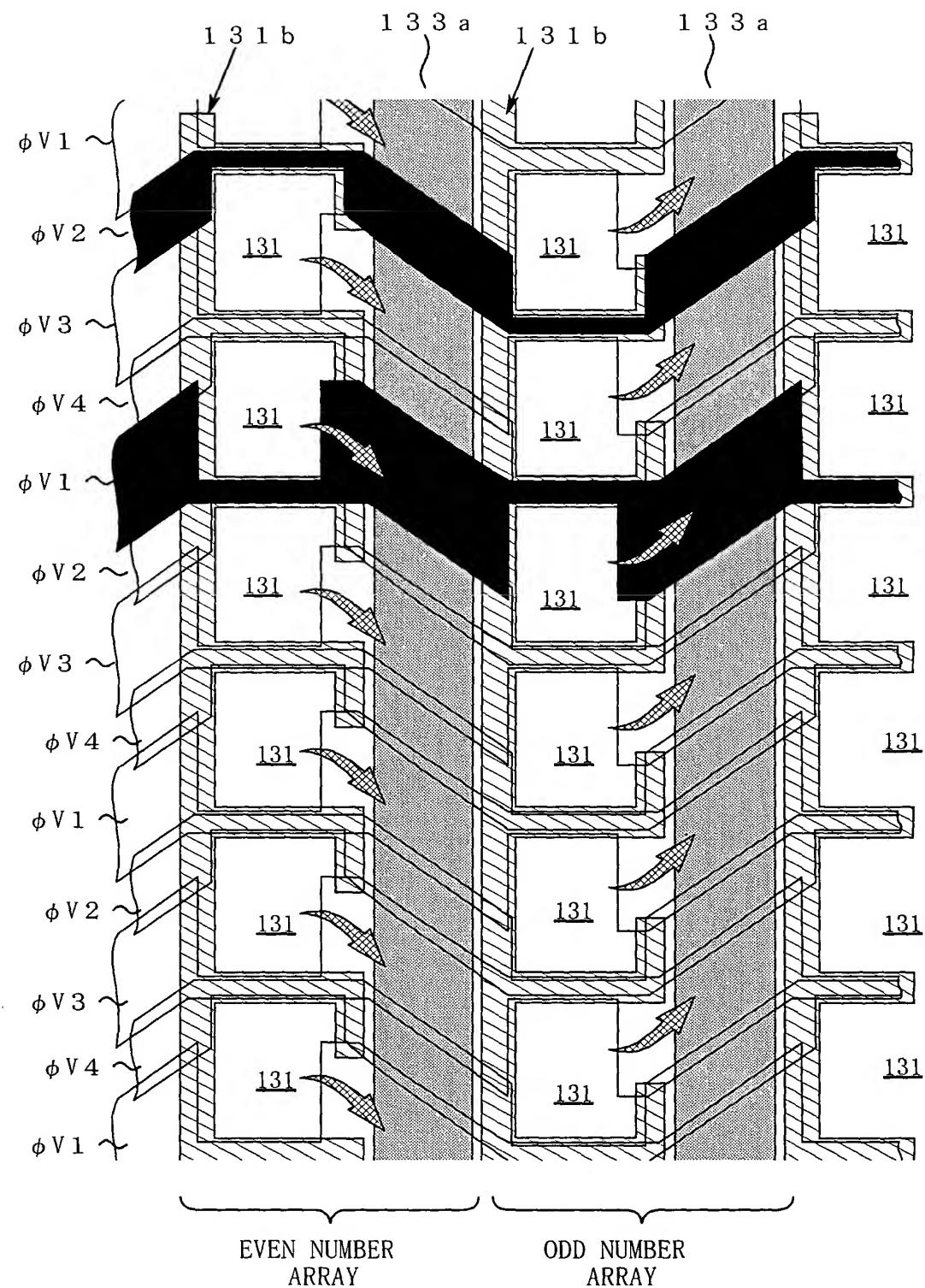


FIG. 16

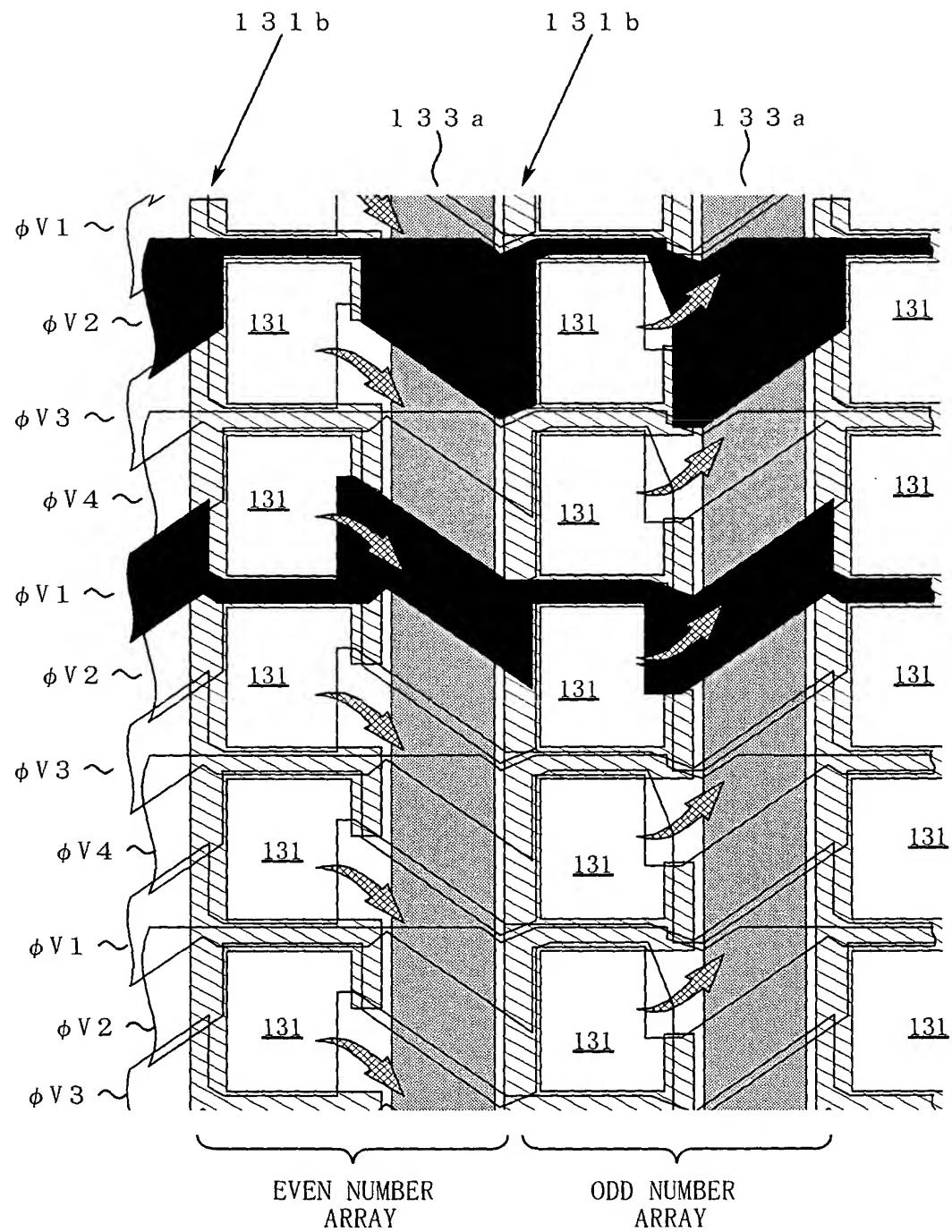


FIG. 17

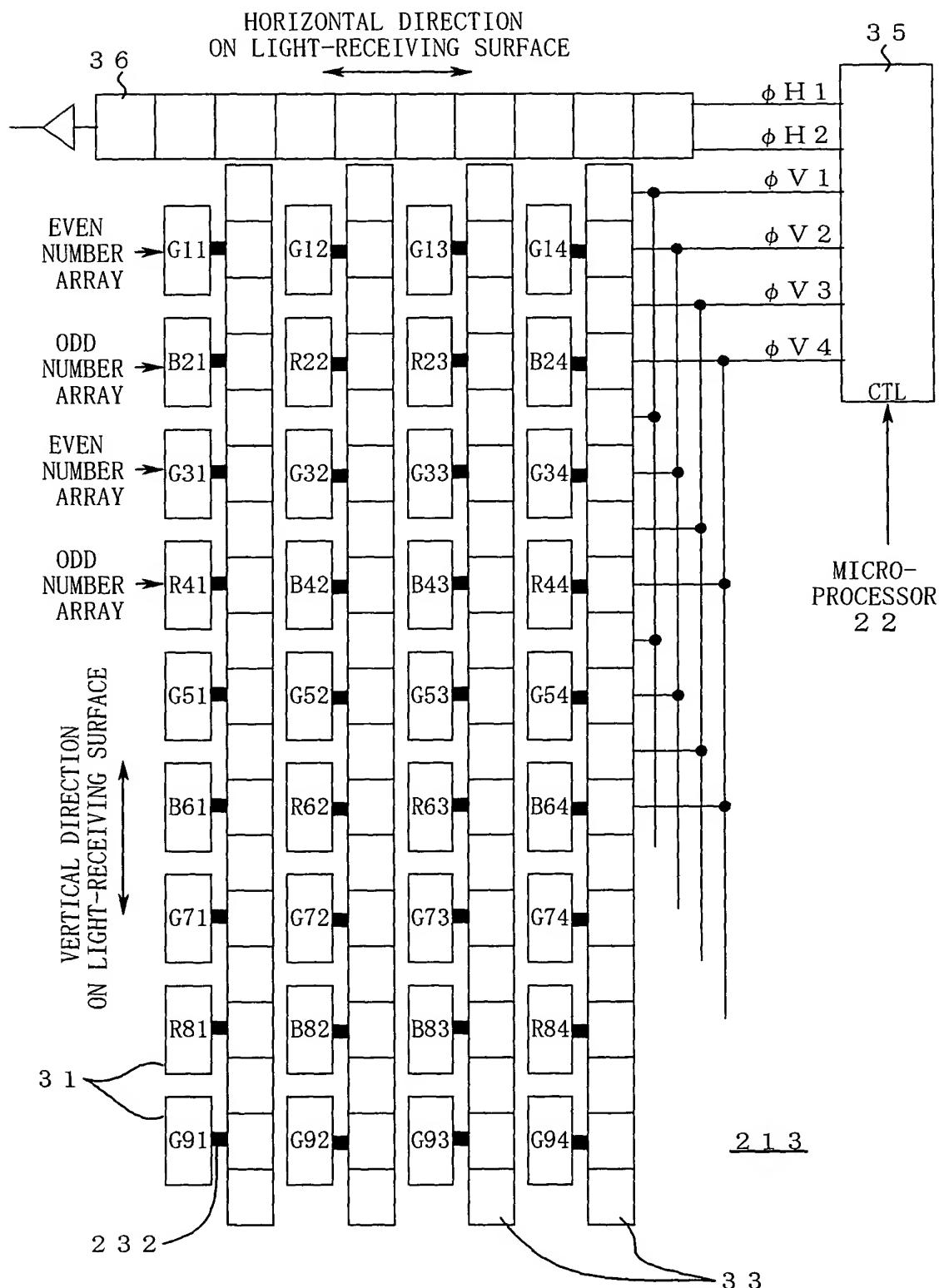


FIG. 18

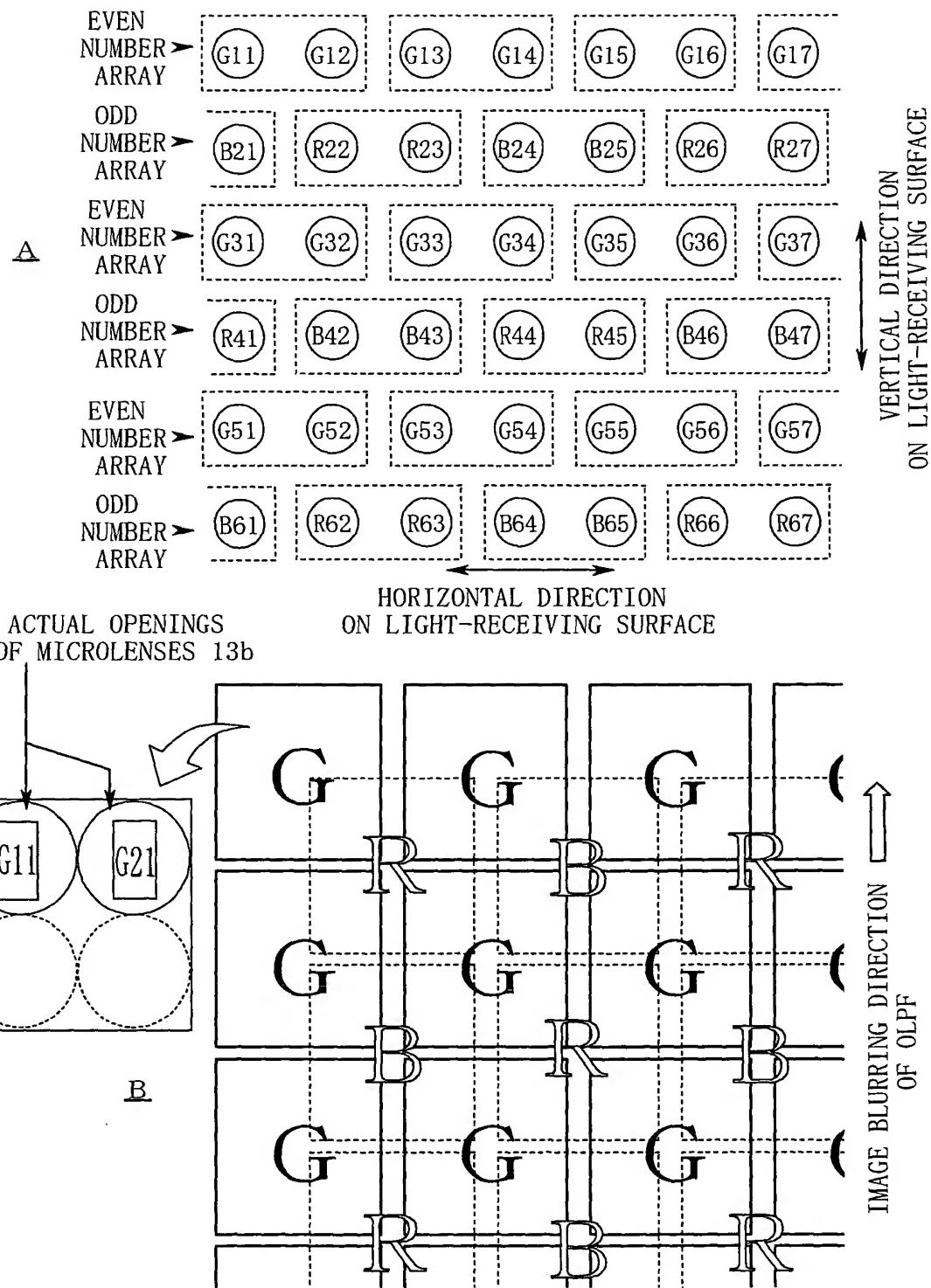


FIG. 1 9

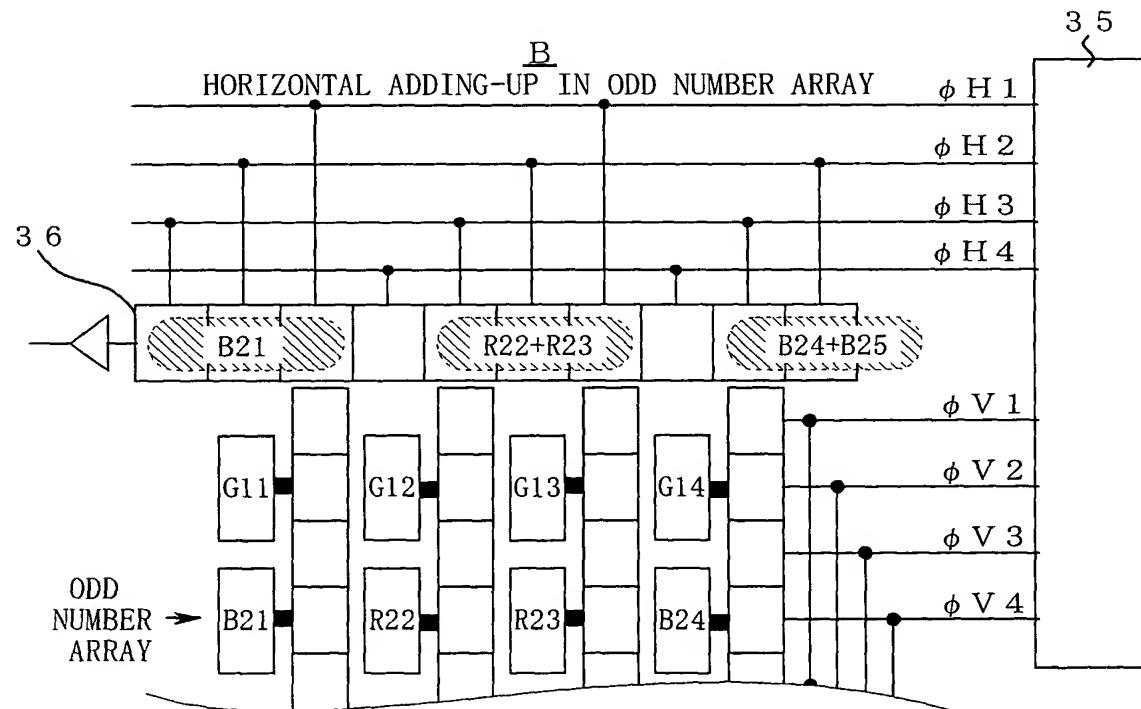
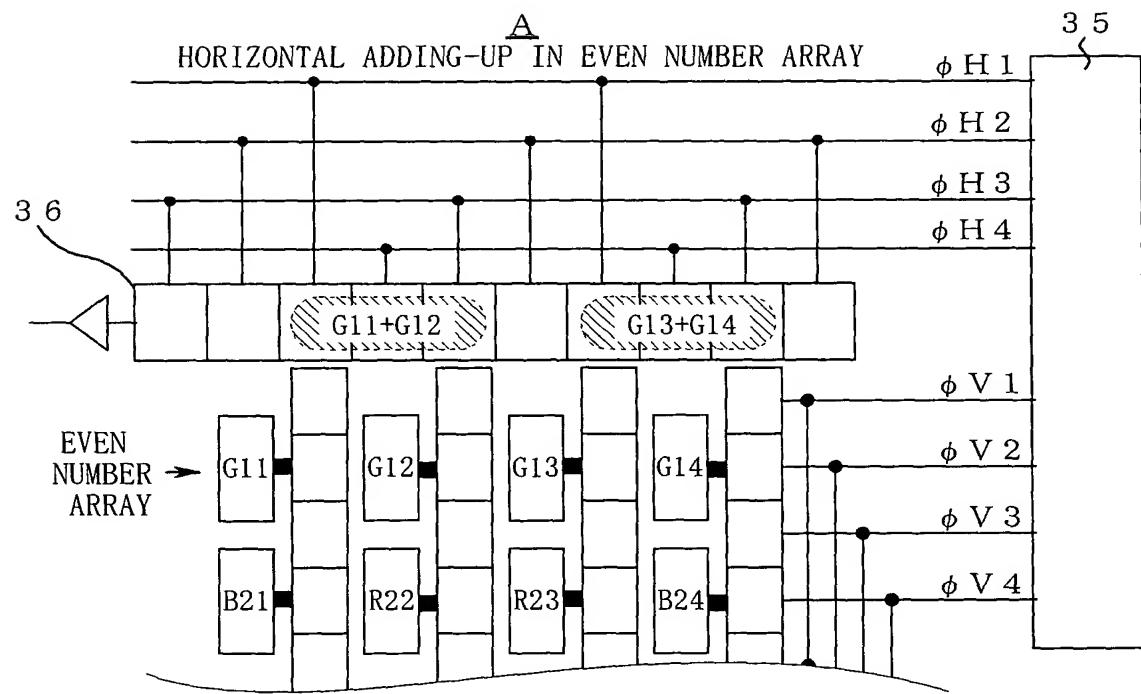


FIG. 2 O

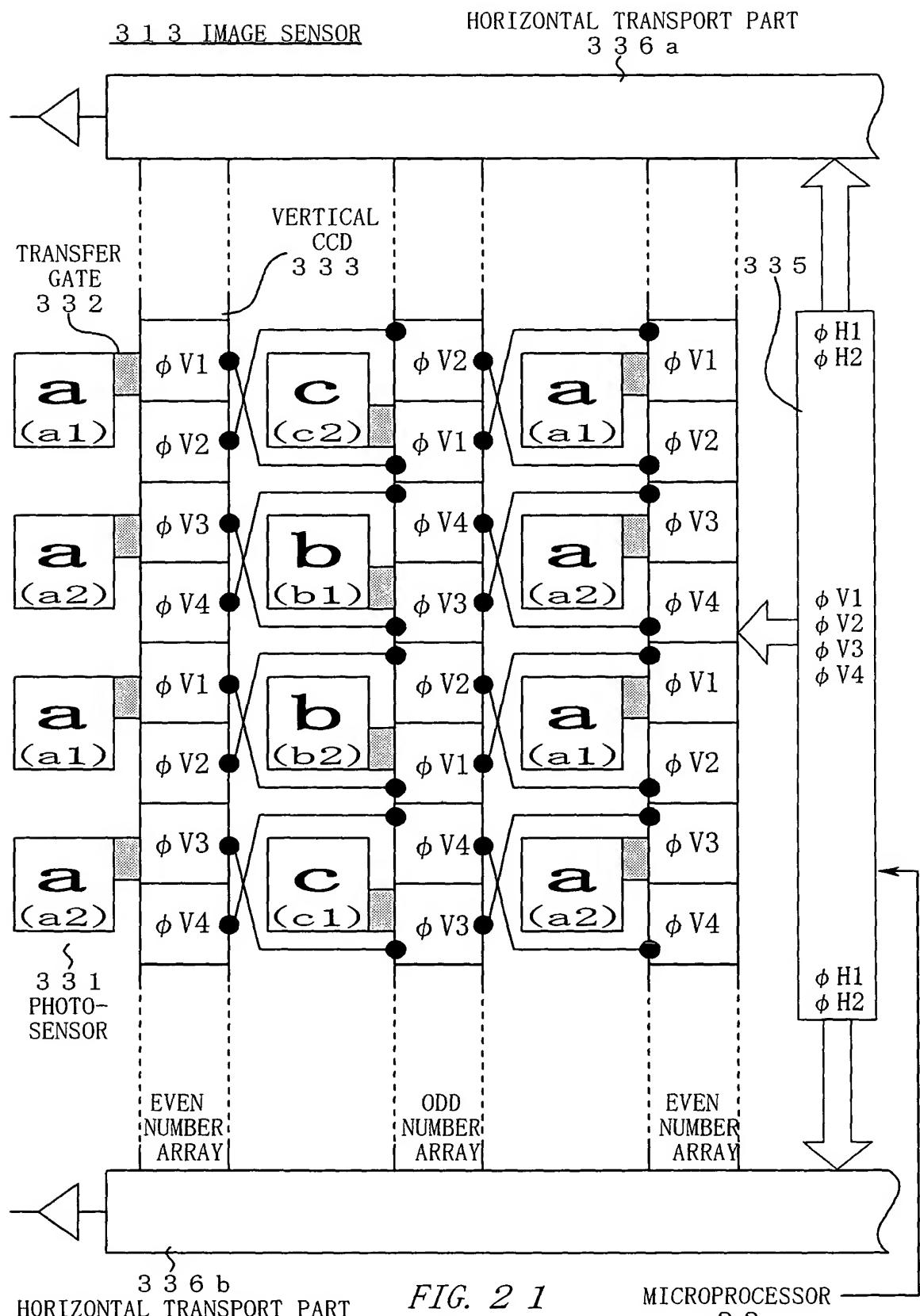
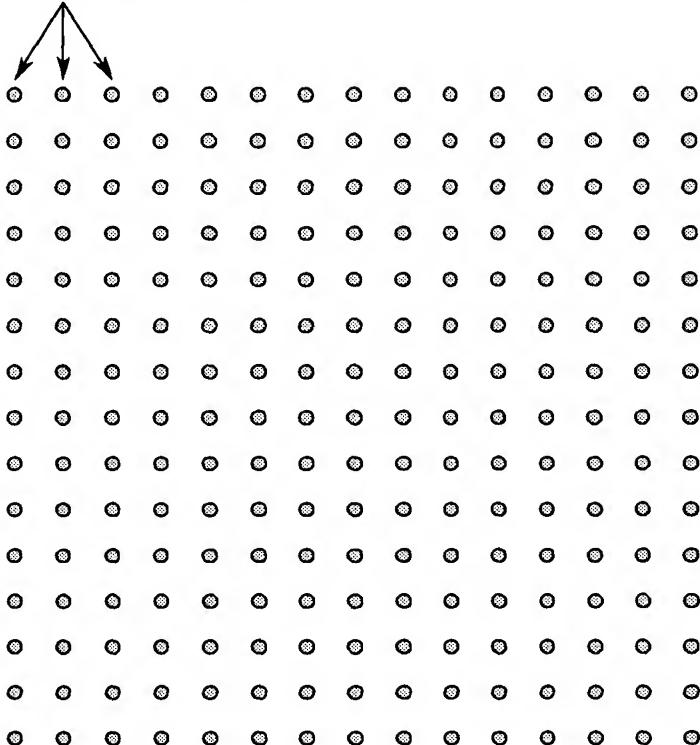


FIG. 21

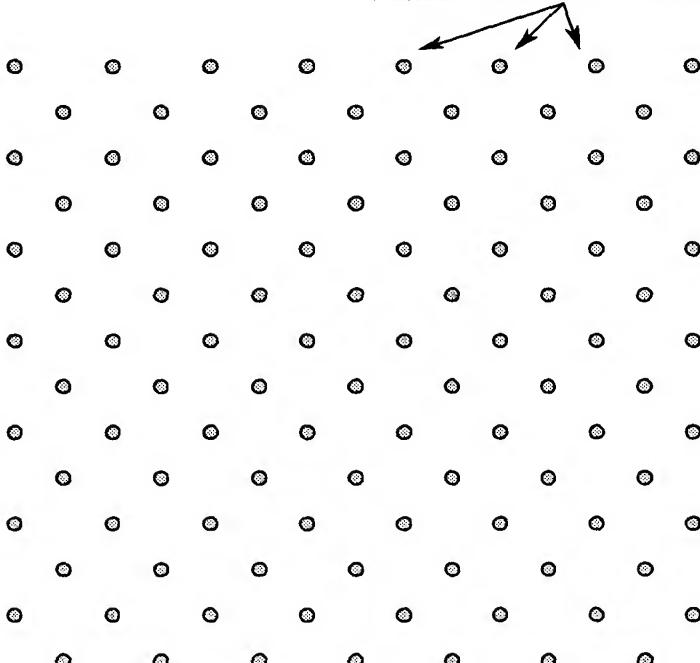
MICROPROCESSOR 2 2

PIXEL SAMPLING POINTS



(A)
PIXEL SAMPLING
POINTS IN GRID
IMAGING MODE

PIXEL SAMPLING POINTS



(B)
PIXEL SAMPLING
POINTS IN DIAGONAL
GRID IMAGING MODE

FIG. 22

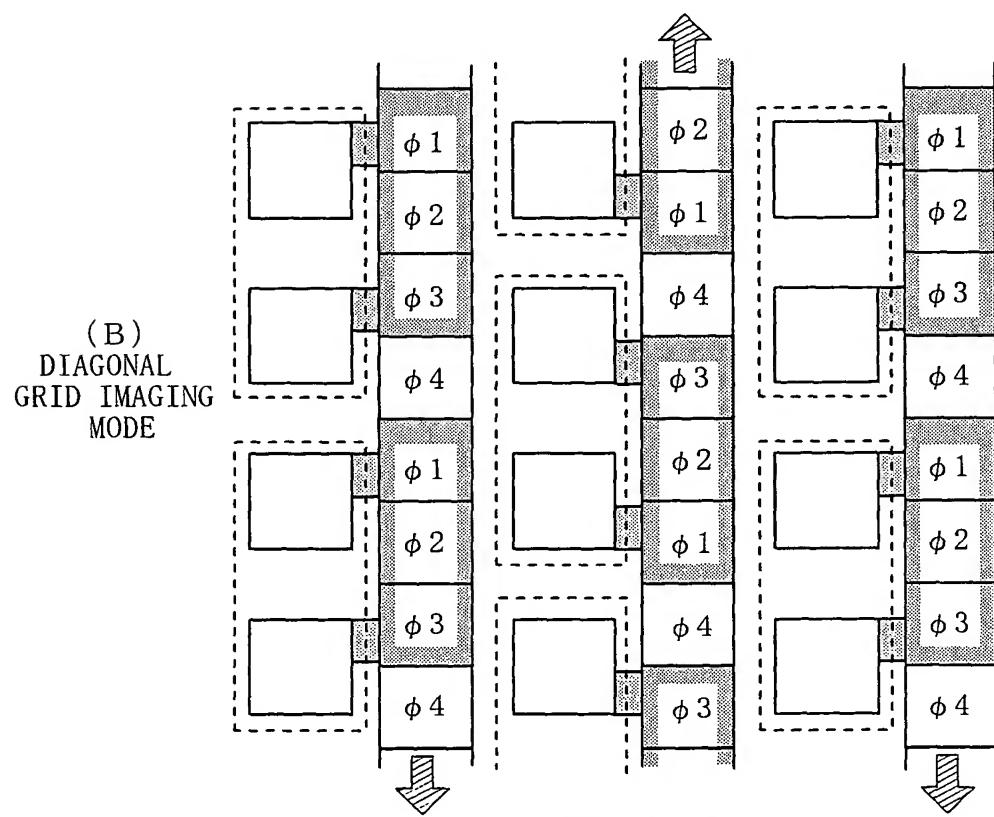
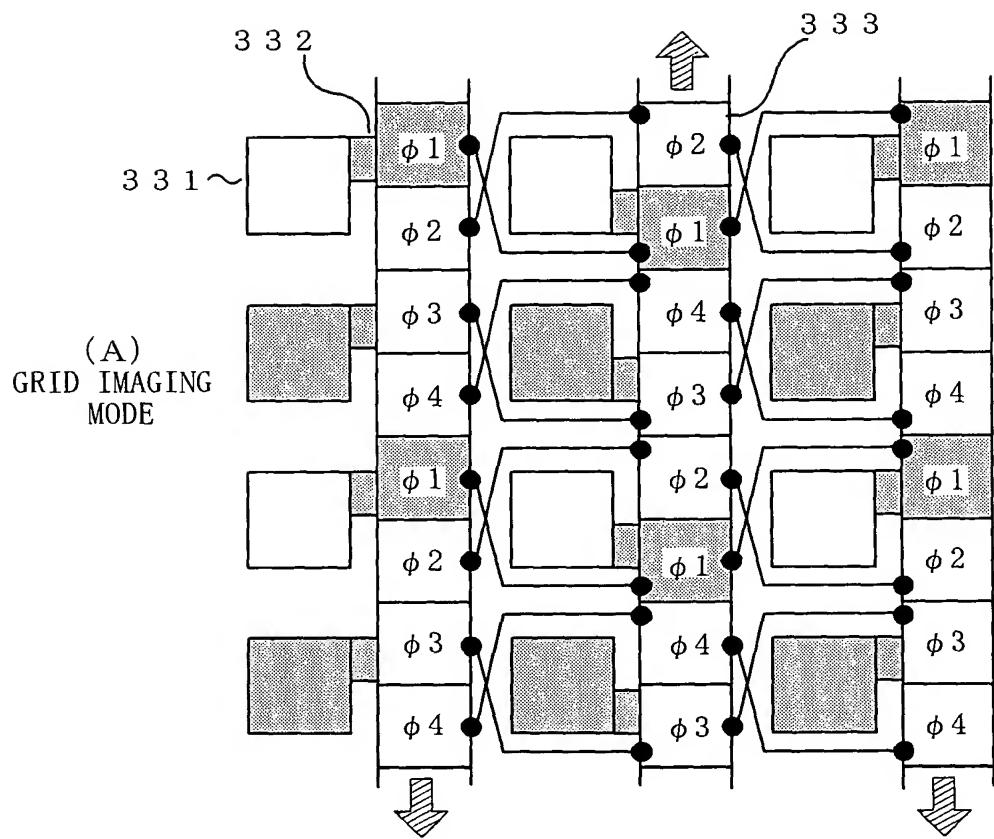


FIG. 2 3

FIG. 24

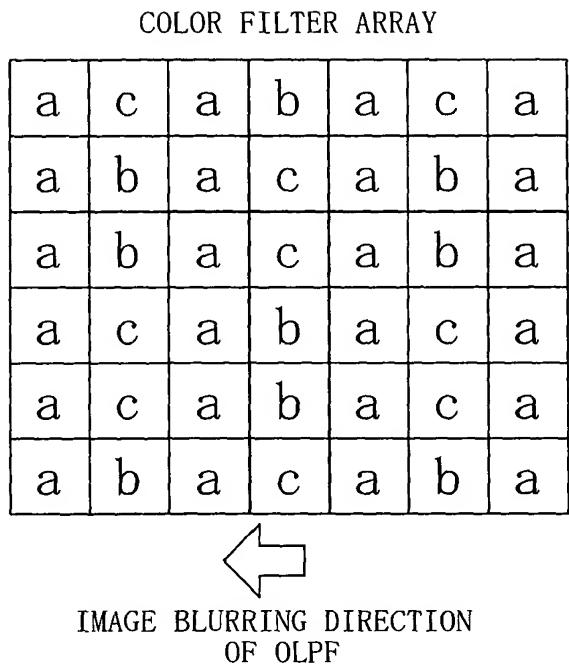


FIG. 25

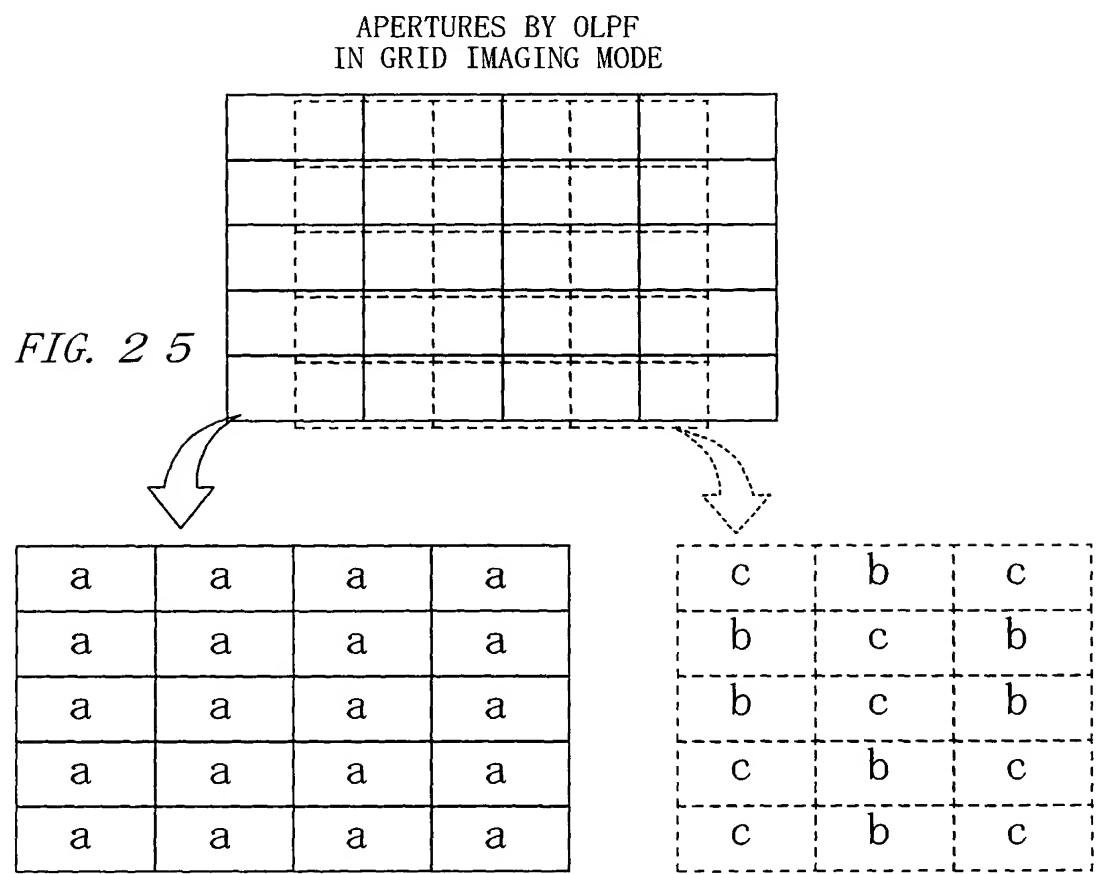


FIG. 2 6

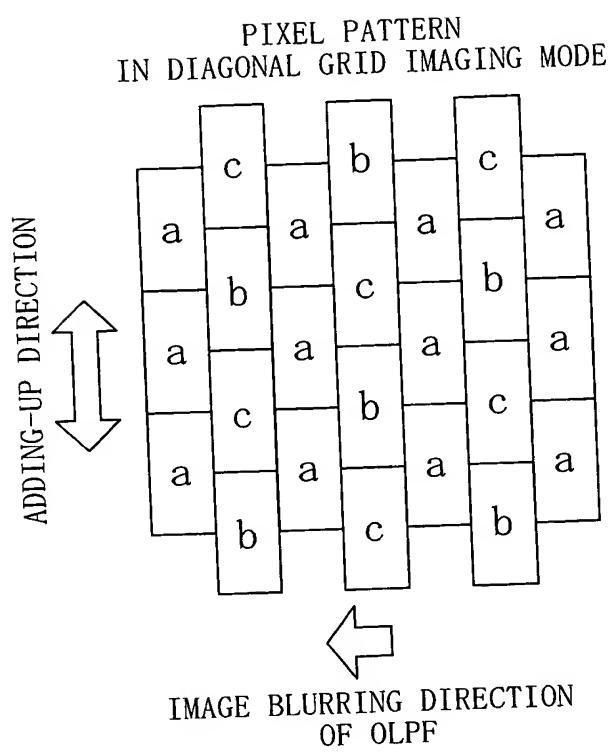


FIG. 2 7

APERTURES BY OLPF
IN DIAGONAL GRID IMAGING MODE

a	a	a	a
a	a	a	a
a	a	a	a

c	b	c	
b	c	b	
c	b	c	

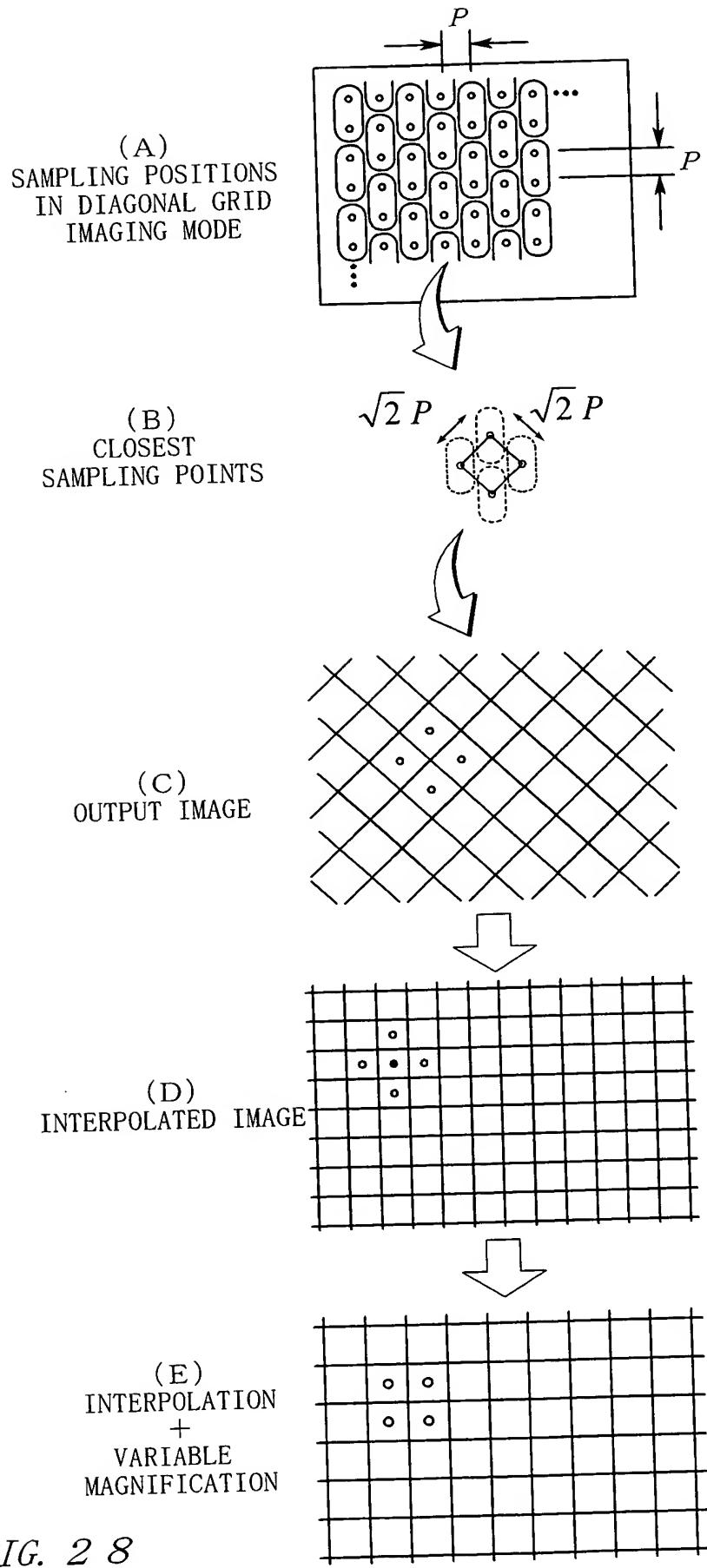


FIG. 2 8

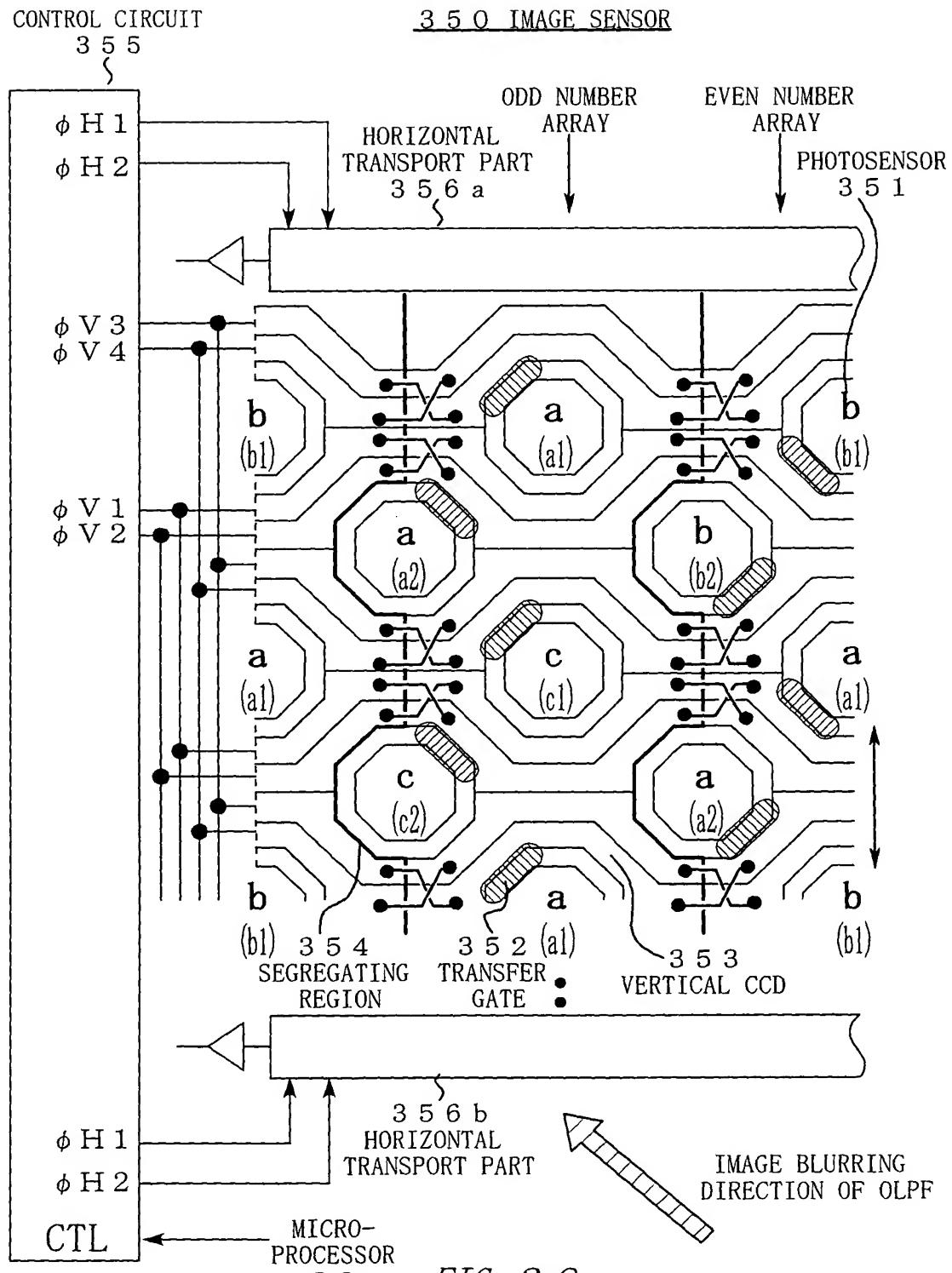


FIG. 29

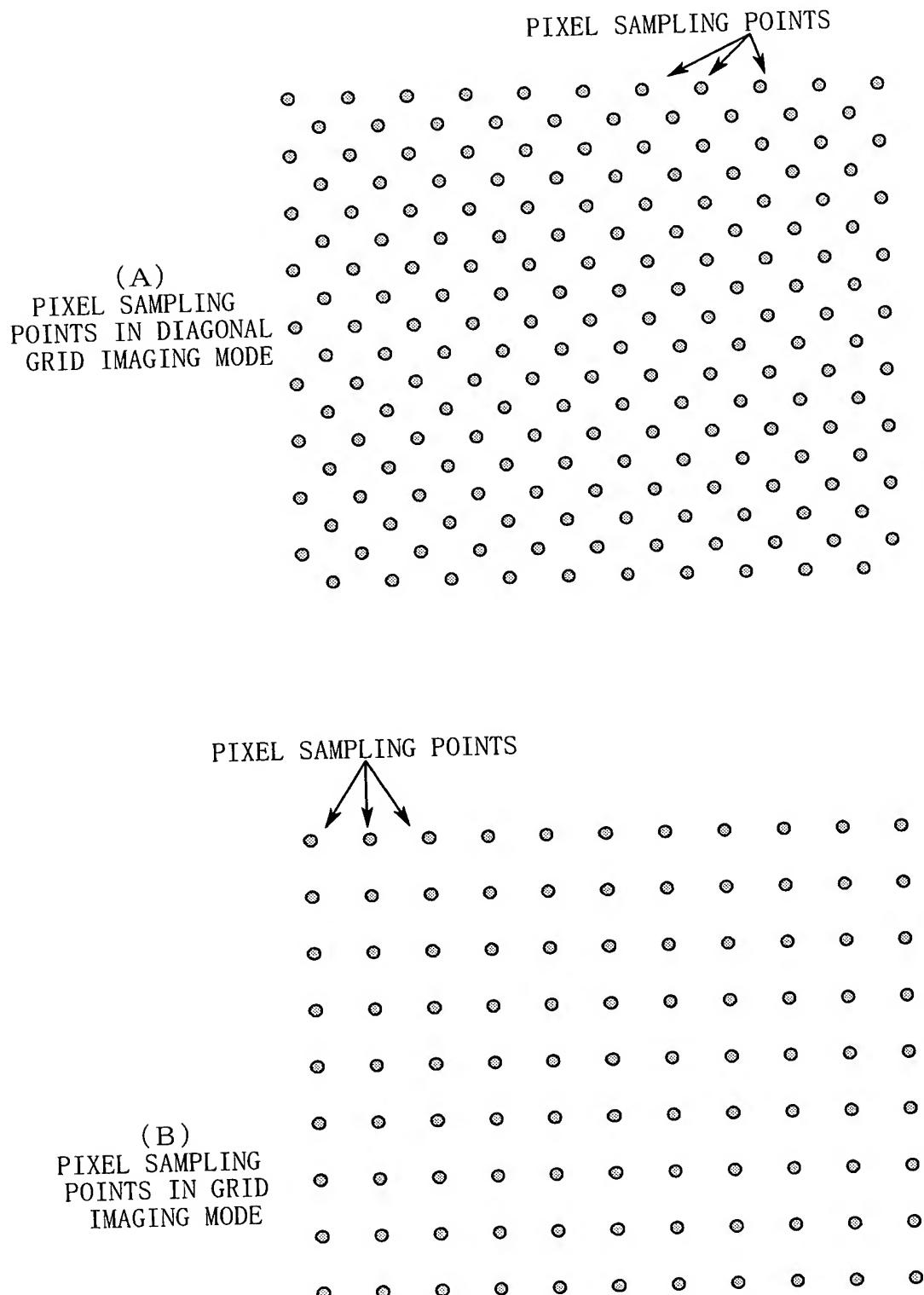


FIG. 30

PIXEL PATTERN
IN GRID IMAGING MODE

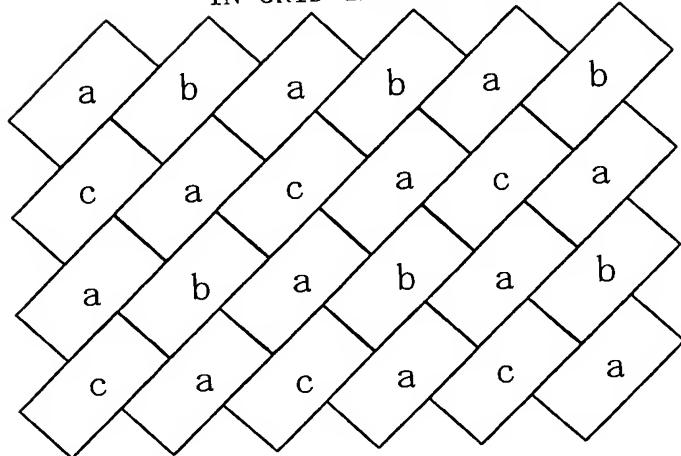


FIG. 3 1

↙ IMAGE BLURRING DIRECTION OF OLPF

↔ ADDING-UP DIRECTION

APERTURES BY OLPF
IN GRID IMAGING MODE

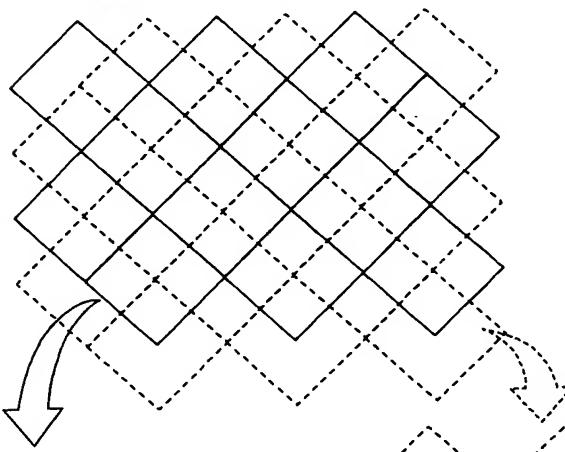


FIG. 3 2

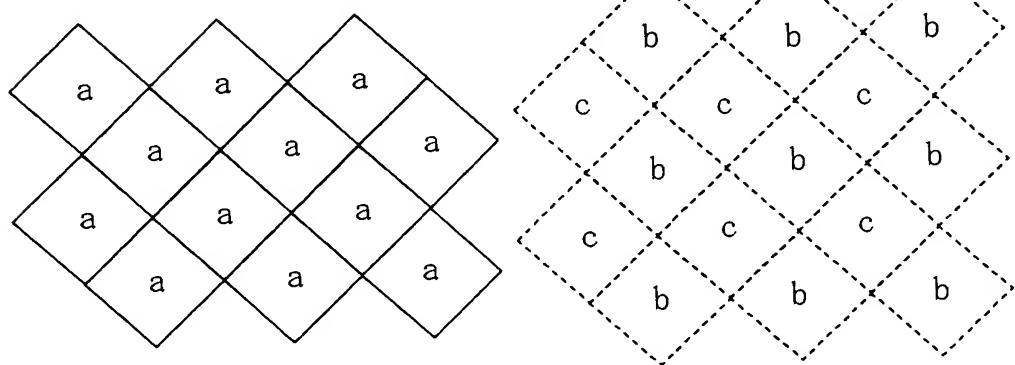


FIG. 3 3

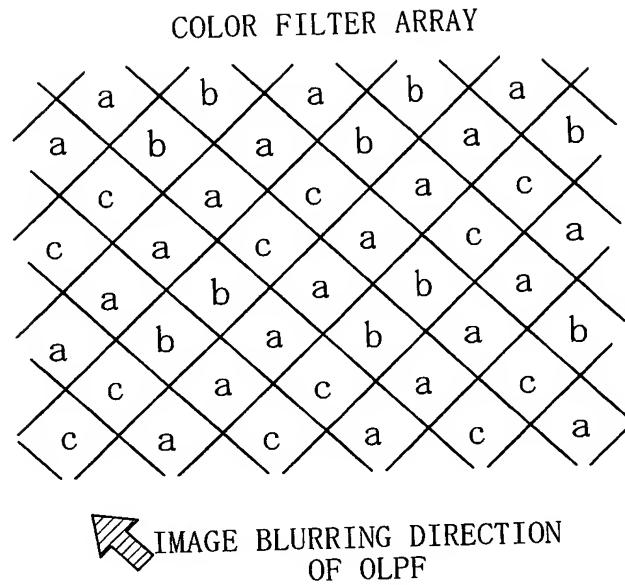
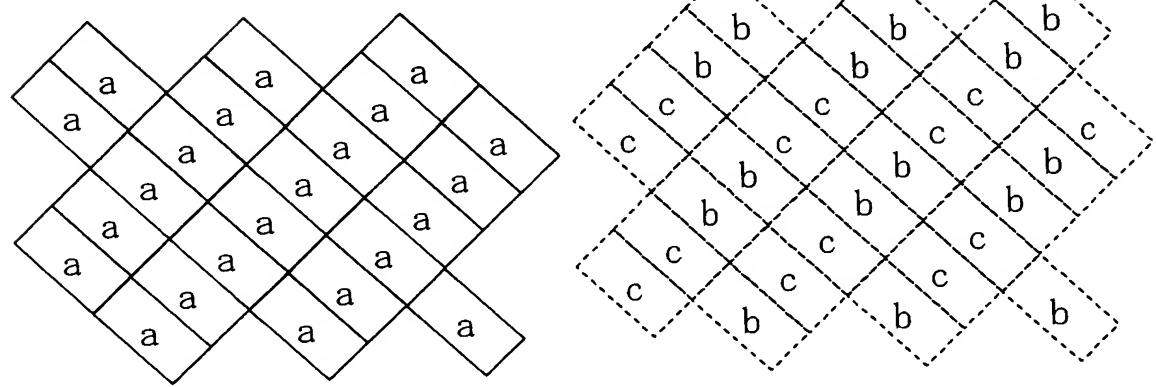


FIG. 3 4



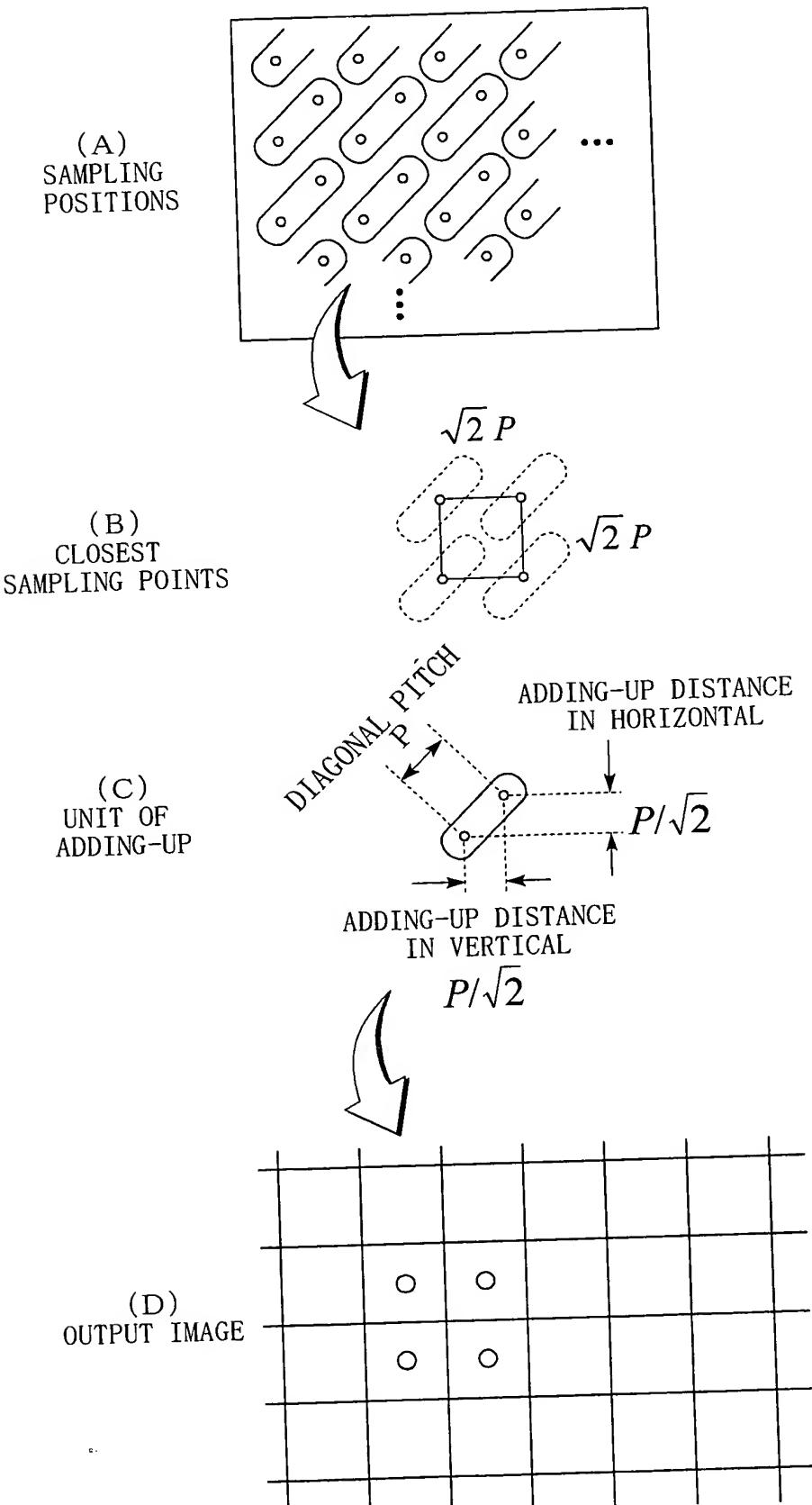


FIG. 3 5

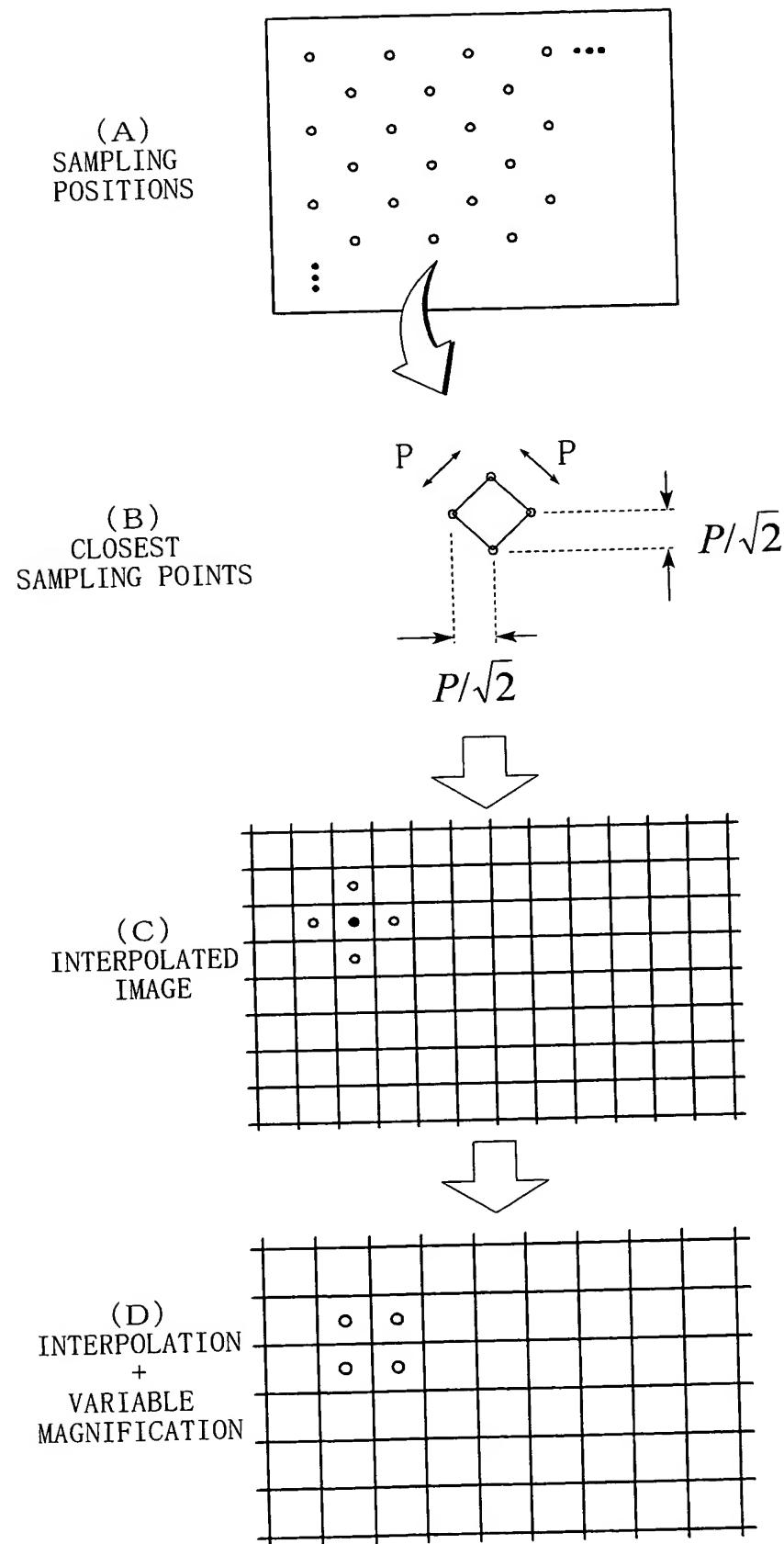


FIG. 3 6

FOUR COLOR PATTERN 1

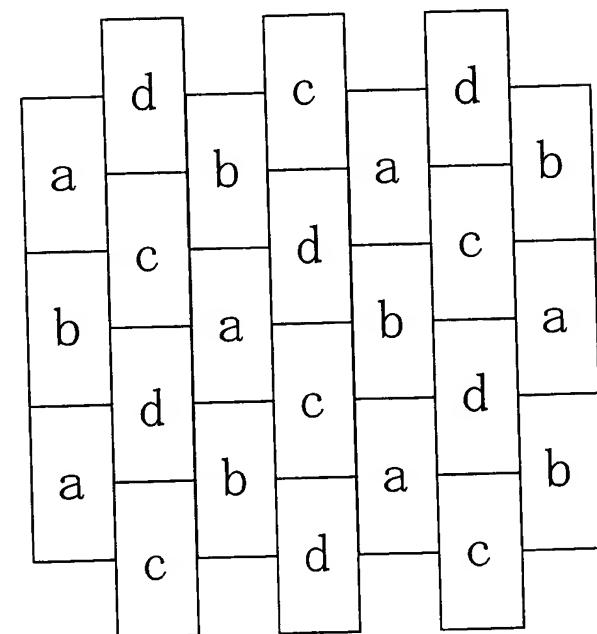
(A)
GRID
IMAGING MODE

a	d	b	c	a	d	b
a	c	b	d	a	c	b
b	c	a	d	b	c	a
b	d	a	c	b	d	a
a	d	b	c	a	d	b
a	c	b	d	a	c	b

← IMAGE BLURRING
DIRECTION OF OLPF

(B)
DIAGONAL GRID
IMAGING MODE

↑
ADDING-UP
DIRECTION



← IMAGE BLURRING
DIRECTION OF OLPF

FIG. 3 7

FOUR COLOR PATTERN 2

(A)
GRID IMAGING
MODE

a	d	a	c	a	d	a
a	c	a	d	a	c	a
b	c	b	d	b	c	b
b	d	b	c	b	d	b
a	d	a	c	a	d	a
a	c	a	d	a	c	a

IMAGE BLURRING
DIRECTION OF OLPP

(B)
DIAGONAL GRID
IMAGING MODE

↑
ADD-UP
DIRECTION
↓

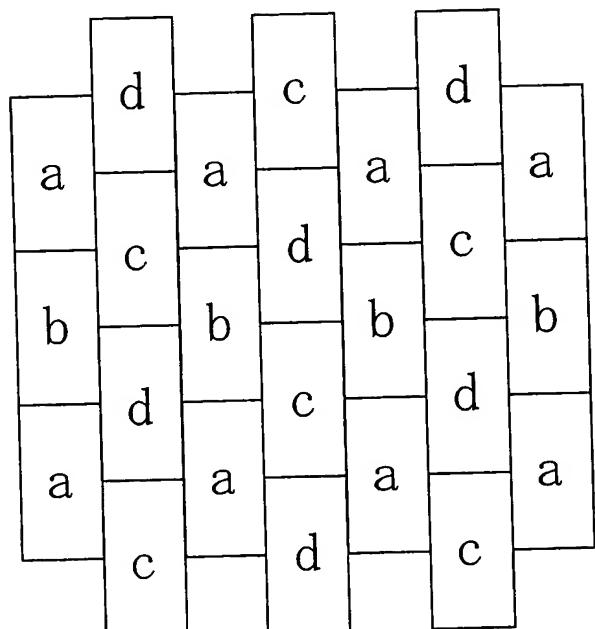


IMAGE BLURRING
DIRECTION OF OLPP

FIG. 3 8

9.1 ELECTRONIC CAMERA

